

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

## SEQUENCE LISTING

<110> SIEMEISTER, GERHARD  
 HABEREY, MARTIN  
 THIERAUCH, KARL-HEINZ

<120> COMBINATIONS AND COMPOSITIONS WHICH INTERFERE WITH  
 VEGF/VEGF AND ANGIOPOIETIN/TIE RECEPTOR FUNCTION  
 AND THEIR USE

<130> SCH-1815

<140> 09/887,527

<141> 2001-06-25

<150> DE 00250194.8

<151> 2000-06-23

<150> DE 00250214.4

<151> 2000-06-28

<160> 60

<170> PatentIn Ver. 2.1

<210> 1

<211> 1835

<212> DNA

<213> Homo sapiens

<400> 1

```

ttttacagtt ttcccttttct tcagagttta ttttgaattt tcattttttgg ataaccaagc 60
agctcttttaa gaagaatgca cagaagagtc attctggcac ttttggatag tacataagat 120
tttcttttttt ttttttaaat ttttttttaat agtcacattc agctcgcttg ctcaaaccag 180
actccacat tgggtgagca agatgagccc ataggattcc agagttaata cgtaaccgta 240
tatacaaaaca gcaaaaaaac cataatggtg ccacagggat ggagcagggg agggcatctc 300
taacgtgtcc tctagtctat cttcgctaaa cagaaccac gttacacatg ataactagag 360
agcacactgt gttgaaacga ggatgctgac cccaaatggc acttggcagc atgcagttta 420
aagcaaaaga gacatccttt aataactgta taaaatccag gcagttccat taaaggggtt 480
aagaaaacca acaacaacaa aaagcgaggg actgtctgtt gtcactgtca aaaaggcact 540
tggagttaat gggaccagga ttggaggact cttagctgat acagatttca gtacgatttc 600
attaaaaggc ttggatgtta agagaggaca ctcagcgggt cctgaagggg gacgctgaga 660
tggaccgctg agaagcggaa cagatgaaca caaaggaaac aaatctttac aaccaaattg 720
catttaagcg acaacaaaaa aaggcaaaacc ccaaaacgca acctaaccac agcaaaatct 780
aagcaaaatc agacaacgaa gcagcgatgc atagctttcc tttgagagaa cgcatacctt 840
gagacgctac gtgccaacct aagttctcaa cgacagcttc acagtaggat tattgtgata 900
aaaatgactc aagcgatgca aaaagtttca tctgttccca gaatccgagg gagaactgag 960
gtgatcgtaa gagcatagcg acatcacgtg cggtttctta atgtccctgg tggcggatac 1020
gccgagtcct cggaaggaca tctggacacc actttcagcc acctccttgc agggggcgaca 1080
tccgccaaag tcatecttta ttccgagtaa taactttaat tcctttctaa catttacacg 1140
gcaaacagga atgcagtaaa cgtccacgtc cgtcccacgg ctgggctgcc gttccgtttc 1200
ctccacgaac gggtagcgcg ttccatgaga aaggatattt ggcaatttta tattccacag 1260
tcaggtgggt ctgcgatagc tcatttaatg ttaaaccgca tcaggggcct ctctctcgtt 1320
ttctgccagg ggcttttctt gtcttctcct tggcgagctc gtgggcagat cttctctggt 1380
gggggctggc tgctggctcc gagggggcat ccgcagtcgg tctggctcgt tcctcctgca 1440
ggctgggcag ctggccacca cttctccgac tcgacccctc caacaagcat cgcagggcac 1500
tgtcctcggg ggtacagacc gtggtcccac attcgctacc actctgttcc acgtcatcca 1560
ggtacacgag ctgcgtgtag gccgtgctgt ctggggctcg aggctctttc tgctggtgct 1620

```

```

cttggacggg cgggtagttc tgctgcagag acaaagcatc tccccctccc ttccgggctg 1680
attttgggttc attcatatct acgccagagt ccaaactggc atcattactt ccgttccttc 1740
cagctctttg gagaatcaat gtatgaatgt ctaacctgac cgctggacct gccatccaag 1800
gagacgaacc acgcccgggg gtgcggaagc ggcct 1835

```

```

<210> 2
<211> 581
<212> DNA
<213> Homo sapiens

```

```

<400> 2
gttctagatt gttttattca gtaattagct cttaagaccc ctggggcctg tgctaccag 60
acactaacia cagtctctat ccagttgctg gttctgggtg acgtgatctc cccatcatga 120
tcaacttact tctgtggcc cattagggaa gtggtgacct cgggagctat ttgcctgttg 180
agtgcacaca cctggaaaca tactgctctc attttttcat ccacatcagt gagaaatgag 240
tggcccgtta gcaagatata actatgcaat catgcaacaa agctgcctaa taacatttca 300
tttattacag gactaaaagt tcattattgt ttgtaaaagg tgaattcata acctctgcag 360
agttatagtt catacacagt tgatttccat ttataaaggc agaaagtcct tgttttctct 420
aaatgtcaag ctttgactga aaactcccgt ttttccagtc actggagtgt gtgcgtatga 480
aagaaaatct ttagcaatta gatgggagag aagggaata gtacttgaaa tgtaggcct 540
cacctcccca tgacatctc catgagcctc ctgatgtagt g 581

```

```

<210> 3
<211> 516
<212> DNA
<213> Homo sapiens

```

```

<400> 3
tagagatgtt ggttgatgac ccccgggatc tggagcagat gaatgaagag tctctggaag 60
tcagcccaga catgtgcac tacatcacag aggacatgct catgtcgcgg aacctgaatg 120
gacactctgg gttgattgtg aaagaaattg ggtcttccac ctcgagctct tcagaaacag 180
ttgttaagct tcgtggccag agtactgatt ctcttccaca gactatatgt cggaaaccaa 240
agacctccac tgatcgacac agcttgagcc tcgatgacat cagactttac cagaaagact 300
tcttgcgcat tgcaggctctg tgtcaggaca ctgctcagag ttacaccttt ggatgtggcc 360
atgaactgga tgaggaaggc ctctattgca acagtgtgctt ggcccagcag tgcataca 420
tccaagatgc ttttccagtc aaaagaacca gcaaatactt ttctctggat ctactcatg 480
atgaagttcc agagtttgtt gtgtaaagtc cgtctg 516

```

```

<210> 4
<211> 1099
<212> DNA
<213> Homo sapiens

```

```

<400> 4
cccacaacac agggggcctg aaacacgcca gcctctcctc tgtggtcagc ttggcccagt 60
cctgctcact ggatcacagc ccattgtagg tggggcatgg tggggatcag ggcccctggc 120
ccacggggag gtagaagaag acctggtccg tgtaagggtc tgagaagggt ccctgggtcg 180
ggggtgcgtc ttggccttgc cgtgccctca tccccgggt gaggcagcga cacagcagg 240
gacccaactc cagcaggtta agcaccaggg agatgagtcc aaccaccaac atgaagatga 300
tgaagatggg ctctccgtg gggcgagaga caaagcagtc cagcaggtag gggcagggtg 360
ctcgctggca caaaaacacg ggctccatgg tccagccgta caggcgccac tggccataga 420
ggaagcctgc ctctagcaca ctcttgaga gcacactggc gacatagggt cccatcagt 480
ctccgaggat gcgcaggcga ccattctctg ccaccgagat cttggccatc tgacgtcta 540
cggccgcccag cggccgctcc acctgtgggt ccttggccgg cagtggccgc agctccccct 600
ccttctgccc cagccgctct tctcgccgag acaggtaaat gacatggccc aggtagacca 660
gggtgggtgt gctgacgaag aggaactgca gcaccagta gcggatgtgg gagatgggga 720
aggcctggtc atagcagacg ttggtgcagc ctggctgggc cgtgttacac tcgaaatctg 780

```

actgctcgtc	acccccacact	gactcgccgg	ccaggcccag	gatgaggatg	cggaagatga	840
agagcaccgt	cagccagatc	ttacccacca	cggtcagtg	ctcctggacc	tgggtccagca	900
acttctccac	gaagccccag	tcacccatgg	ctcccgggcc	tccgtcggca	aggagacaga	960
gcacgtcagt	gtgtcagcat	ggcatccttc	tcgttcgccc	agcaacaagc	ctgcagggag	1020
gtctgccacg	cccgttctac	cgectgcctg	ccgggcggcc	caggtggagg	tggggacgat	1080
ggccggagtg	acgcccgcg					1099

&lt;210&gt; 5

&lt;211&gt; 1015

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5

gaggatagg	agcctgggg	caggagtgtg	ggagacacag	cgagactctg	tctccaaaaa	60
aaaaagtgt	ttttgaaaat	gttgagggtg	aaatgatggg	aaccaacatt	ctttggattt	120
agtggggagc	ataatagcaa	acaccccctt	ggttcgcaca	tgtacaggaa	tgggacccag	180
ttggggcaca	gccatggact	tccccgcctt	ggaatgtgtg	gtgcaaagtg	gggccagggc	240
ccagacccaa	gaggagaggg	tgggtccgcag	acaccccggg	atgtcagcat	cccccgacct	300
gccttctggc	ggcacctccc	gggtgctgtg	ttgagtcagc	aggcatgggg	tgagagcctg	360
gtatatgtctg	ggaacaggg	gcaggggcca	agcgttcttc	cttcagcctt	gacttggggc	420
atgcaccccc	tctcccccaa	acacaaaaca	gcacttctcc	agtatgggtg	caggacaggt	480
gtcccttcag	tcctctgggt	atgacctcaa	gtcctacttg	ggccctgcag	cccagcctgt	540
gttgtaacct	ctgcgtcctc	aagaccacac	ctggaagatt	cttcttccct	ttgaaggaga	600
atcatcattg	ttgctttatc	acttctaaga	cattttgtac	ggcacggaca	agttaaacag	660
aatgtgcttc	cctccctggg	gtctcacacg	ctcccacgag	aatgccacag	gggcccgtgca	720
ctgggacagg	ttctctgtag	aaccccagg	gcttcggccc	agaccacagc	gtcttgccct	780
gagcctagag	cagggagtcc	cgaacttctg	cattcacaga	ccacctccac	aattgttata	840
accaaaggcc	tcctgttctg	ttatttcaact	taaatcaaca	tgctattttg	ttttcaactca	900
cttctgactt	tagcctcgtg	ctgagccgtg	tatccatgca	gtcatgttca	cgtgctagtt	960
acgttttttct	tcttacacat	gaaaataaat	gcataagtgt	tagaagaaaa	aaaaa	1015

&lt;210&gt; 6

&lt;211&gt; 2313

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6

ccagagcagg	cctgggtggg	agcagggagc	gtgcaccgga	cggcgggata	gagcaaattg	60
gtctggccat	ggagcacgga	gggtcctacg	ctcgggcggg	gggcagctct	cggggctgct	120
gggtattacct	gcgctaactc	ttcctcttcg	tctccctcat	ccaattcctc	atcatcctgg	180
ggctcgtgct	cttcatgggt	tatggcaacg	tgcacgtgag	cacagagtcc	aacctgcagg	240
ccaccgagcg	ccgagccgag	ggcctataca	gtcagctcct	agggctcacg	gcctcccagt	300
ccaacttgac	caaggagctc	aacttcacca	cccgcgccaa	ggatgccatc	atgcagatgt	360
ggctgaatgc	tcgcccgcag	ctggaccgca	tcaatgccag	cttccgccag	tgccagggtg	420
accgggtcat	ctacacgaac	aatcagaggt	acatggctgc	catcatcttg	agtgagaagc	480
aatgcagaga	tcaattcaag	gacatgaaca	agagctgcga	tgccttgctc	ttcatgctga	540
atcagaagg	gaagacgctg	gaggtggaga	tagccaagga	gaagaccatt	tgcactaagg	600
ataaggaaag	cgtgctgctg	aacaaacgcg	tggcggagga	acagctgggt	gaatgcgtga	660
aaacccggga	gctgcagcac	caagagcgcc	actggccaag	gagcaactgc	aaaagggtgca	720
agccctctgc	ctgcccctgg	acaaggacaa	gtttgagatg	gaccttcgta	acctgtggag	780
ggactccatt	atcccacgca	gcctggacaa	cctgggttac	aacctctacc	atcccctggg	840
ctcggaattg	gcctccatcc	gcagagcctg	cgaccacatg	cccagcctca	tgagctccaa	900
ggtggaggag	ctggcccggg	gcctccgggc	ggatatcgaa	cgcgtggccc	gcgagaactc	960
agacctcca	cgccagaagc	tggaaagcca	gcagggccctg	cgggccagtc	aggaggcgaa	1020
acagaaggag	gagaaggagg	ctcaggcccg	ggaggccaag	ctccaagctg	aatgctcccg	1080
gcagacccag	ctagcgctgg	aggagaaggc	gggtgctgcg	aaggaaacgag	acaacctggc	1140
caaggagctg	gaagagaaga	agagggaggc	ggagcagctc	aggatggagc	tggccatcag	1200
aaactcagcc	ctggacacct	gcataagac	caagtcgcag	ccgatgatgc	cagtgctcaag	1260

```

gccccatggggc cctgtcccca acccccagcc catcgacca gctagcctgg aggagttaa 1320
gaggaagatc ctggagtcct agaggccccc tgcaggcatc cctgtagccc catccagtgg 1380
ctgaggaggc tccaggcctg aggaccaagg gatggcccga ctggcggtt tgcggaggat 1440
gcagggatat gctcacagcg cccgacacaa cccctcccg cggcccca ccacccagg 1500
ccaccatcag acaactccct gcatgcaaac ccctagtacc ctctcacacc cgcaccgcg 1560
cctcacgac cctcaccag agcacacggc cgcggagatg acgtcacgca agcaacggcg 1620
ctgacgtcac atatcacgt ggtgatggcg tcacgtggcc atgtagacgt cacgaagaga 1680
tatagcgatg gcgtcgtgca gatgcagcac gtcgcacaca gacatgggga acttggcatg 1740
acgtcacacc gagatgcagc aacgacgtca cgggccatgt cgacgtcaca catattaatg 1800
tcacacagac gcggcgatgg catcacacag acggtgatga tgtcacacac agacacagt 1860
acaacacaca ccatgacaac gacacctata gatatggcac caacatcaca tgcacgcatg 1920
ccctttcaca cacactttct acccaattct cacctagtgt cagttcccc cgaccctggc 1980
acacgggcca aggtacccac aggtacccat cccctcccg acagccctgg gccccagcac 2040
ctccctcct ccagcttctt ggccctccag ccacttctc acccccagt cctggacccg 2100
gaggtgagaa caggaagcca ttcacctcg ctcttgagc gtgagtgtt ccaggacccc 2160
ctcggggccc tgagccgggg gtgaggggca cctgtgtcg ggaggggagc cactccttct 2220
cccccaactc ccagccctgc ctgtggcccg ttgaaatgtt ggtggcactt aataaatatt 2280
agtaaatcct taaaaaaaaa aaaaaaaaaa aaa 2313

```

<210> 7

<211> 389

<212> DNA

<213> Homo sapiens

<400> 7

```

gccaaaaaga tggcttcaaa agtaagaatg aaacatttga tccattcagc tttaggctat 60
gccactggat tcatgtctag aaaagatagg ataatttctg taaagaaatg aagaccttgc 120
tattctaaaa tcagatcctt acagatccag atttcaggaa acaatacat aggggactaa 180
ctttccttgt tcagattagt tttctcctt tgcaccagc tatataatat gaggaagtat 240
tgacttttta aaagtgtttt agttttccat ttctttgata tgaaaagtaa ttttcggga 300
gaaccctgag ctattaataa tctatgtggc tagtgcgat atattggtct gaatttgttc 360
tccttttgtg gtgtccagtg ggtaacatc 389

```

<210> 8

<211> 157

<212> DNA

<213> Homo sapiens

<400> 8

```

tgctttaaac agctgtgtca aaaactgaca tcagagagta aattgaattt ggttttgtag 60
gaagcaggaa gcaagccac tcaaactgta aatttggcat gagggatcca gtaactttct 120
cctcaatctg tgaactatat gtgagtttga tattttg 157

```

<210> 9

<211> 561

<212> DNA

<213> Homo sapiens

<400> 9

```

aatagtcaaa acataaacia aagctaatta actggcactg ttgtcacctg agactaagt 60
gatgttgttg gctgacatac aggtcagcc agcagagaaa gaattctgaa tcccccttgc 120
tgaactgaac tattctgtta catatgggtg acaaactctgt gtgttatttc ttttctacct 180
accatattta aatttatgag tatcaaccga ggacatagtc aaaccttcga tgatgaacat 240
tctgtatttt ttgcctgatt aatctctgtt gagctctact tgtggtcatt caagatttta 300
tgatgttgaa aggaaaagtg aatatgacct ttaaaaattg tattttgggt gatgatatt 360
tcaccactat aaaactgtca attattgcct aatgttaaag atatccatca ttgtgattaa 420
ttaaacctat aatgagtatt cttaatggag aattcttaat ggatggatta tccccctgatc 480
ttttctttaa aatttctctg cacacacagg acttctcatt ttccaataaa tgggtgtact 540

```

ctgccccaat ttctaggaaa a

561

&lt;210&gt; 10

&lt;211&gt; 1508

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 10

```

cacaaacacg agagactcca cggctctgcct gagcaccgcc agcctcctag gctccagcac 60
tcgcagggtcc attcttctgc acgagcctct ctgtccagat ccataagcac ggtcagctca 120
gggtcgcgga gcagtacgag gacaagtacc agcagcagct cctctgaaca gagactgcta 180
ggatcatcct tctcctccgg gcctgttgct gatggcataa tccgggtgca acccaaatct 240
gagctcaagc caggtgagct taagccactg agcaagggaag atttgggcct gcacgcctac 300
aggtgtgagg actgtggcaa gtgcaaagt aaggagtgc cctaccaag gcctctgcca 360
tcagactgga tctgcgacaa gcagtgcctt tgctcggccc agaactgat tgactatggg 420
acttgtgtat gctgtgtgaa aggtctcttc tatcactgtt ctaatgatga tgaggacaac 480
tgtgctgaca acccatgttc ttgcagccag tctcactgtt gtaacgatg gtcagccatg 540
ggtgtcatgt cctctttttt gccttgttta tgggtgttacc ttccagccaa gggttgcctt 600
aaattgtgcc aggggtgtta tgaccgggtt aacaggcctg gttgccgctg taaaaactca 660
aacacagttt gctgcaaagt tcccactgtc ccccttagga actttgaaaa accaacatag 720
catcattaat caggaatatt acagtaatga ggattttttt tttctttttt taatacacat 780
atgcaaccaa ctaaacagtt ataactcttg cactgttaat agaaagtgg gatagtcttt 840
gctgtttgct gtgaaatgct ttttgtccat gtgccgtttt aactgatatg cttgttagaa 900
ctcagctaatt ggagctcaaa gtatgagata cagaacttgg tgaccatgt attgcataag 960
ctaaagcaac acagacactc ctaggcaaaag tttttgtttg tgaatagtac ttgcaaaact 1020
tgtaaatag cagatgactt ttttccattg ttttctccag agagaatgtg ctatatTTTT 1080
gtatatacaa taatatttgc aactgtgaaa aacaagtgg gccatactac atggcacaga 1140
cacaaaatat tatactaata tgttgtacat tcggaagaat gtgaatcaat cagtatgttt 1200
ttagattgta ttttgcctta cagaaagcct ttattgtaag actctgattt ccttttggac 1260
ttcatgtata ttgtacagtt acagtaaaat tcaaccttta ttttctaatt ttttcaacat 1320
attgtttagt gtaagaata tttatttgaa gttttattat tttataaaaa agaatatTTA 1380
ttttaagagg catcttacia attttgcccc ttttatgagg atgtgatagt tgctgcaaat 1440
gaggggttac agatgcata gtccaatata aaatagaaaa tatattaacg tttgaaatta 1500
aaaaaaaaa

```

&lt;210&gt; 11

&lt;211&gt; 389

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 11

```

gggcagggtga tcagggcaca catttcccggt ccattgagac agtagcattc cgggcaccca 60
tcgtgccagc tctcctcatt tttatgatga tgaccatcca cgggtgagaca agtgcccgac 120
aggatgggtg gccagctga agcacaggcc gctctgcact tgcagataag acagccgtga 180
ctgtcctgct ggaaacccaa ggggcagatc ttactgcatg agagctctgg acatttctta 240
cagcgacaga tgtcacagcc gtgcttatcc ttcagcaatc caagtggaca atacttgtca 300
cagattatgg gtctgcactt cttgggcctt gggcggcact cacagatctc acagttttgg 360
acctcggccg cgaccacgct gggtagcga

```

&lt;210&gt; 12

&lt;211&gt; 981

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 12

```

tttttttttt ttggattgca aaaatttatt aaaattggag acactgtttt aatcttcttg 60
tgccatgaga ctccatcagg cagtctacaa agaccactgg gaggctgagg atcacttgag 120
cccagaagtt tgaggctgta gtaagcttca aaggccactg cactctagct tgggtgaggc 180

```

```

aagacccttt caagcagtaa gctgcatgct tgcttggtgt ggtcattaaa aaccctagtt 240
taggataaca acatattaat cagggcaaaa tacaaatgtg tgatgcttgt tagtagagta 300
acctcagaat caaaatggaa cggttttaca gtgatatcat tatatttcat ttggcagaat 360
cattacatca ttggttacac tgaaaatcat cacatgtacc aaaagctgac tcacctagtt 420
taggataaca ggtctgctg tttgaagatg aaaaataata cccattttaa atttgcctta 480
ctcaatttcc ttctcagtca cattttaact tttaaacagc taatcactcc catctacaga 540
ttaagggtgta tatgccacca aaaccttttg ccacctttaa aatttccttc aaagttttaa 600
ctaagtcttg catttcttca atcatgaatt ctgagtcctt tgcttcttta aaacttgctc 660
cacacagtgt agtcaagccg actctccata cccaagcaag tcatccatgg ataaaaacgt 720
taccaggagc agaaccatta agctggtcca ggcaagtgtg actccaccat ttcaacttcc 780
agctttctgt ctaatgcctg tgtgccaatg gcttgagtta ggcttgctct ttaggacttc 840
agtagctatt ctcatccttc cttggggaca caactgtcca taagggtgcta tccagagcca 900
cactgcatct gcaccagca ccatacctca caggagtcca ctcccacgag cgcctgtat 960
ataagagttc ttttgatgac g

```

981

&lt;210&gt; 13

&lt;211&gt; 401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 13

```

ataactacag cttcagcaga caactaaaga gactgcatta aggtgatttc tctggctata 60
aagagagccc ggccgcagag catgtgactg ctgggacctc tgggataggc aacactgccc 120
tctctcccc agagcgaccc cccgggcagg tcggggccca aggaatgacc cagcaactgc 180
tccctacca gcacactctc ttactgcca cctgcaatta tgctgtgaag atgactgggt 240
gtggtcatca cgattcagag aaatcaagat ctatgacct tttaggcaaa gagagaaact 300
tggaagaattg ctgaggacta ctgaaccttg ttttgctttt taaaaaata ctaaactctc 360
acttcagcat atttagttgt cattaaaatt aagctgatat t

```

401

&lt;210&gt; 14

&lt;211&gt; 1002

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 14

```

gacaatataa aaagtggaaa caagcataaa ttgcagacat aaaataatct tctggtagaa 60
acagttgttg agaacaggtt gagtagagca acaacaacaa aagcttatgc agtcaccttc 120
tttgaatgtg ttaaatataa gtctattct ctttgtccag ctgggttttag ctgagggtag 180
ccaattactt ctcttaaggt ccatggcatt cgccaggatt ctataaaagc caagttaact 240
gaagtaataa tctggggccc atcgacccc cactaagtac tttgtacca tgttgtatct 300
taaaagtcac ttttactgt ttgactcaga atttgggact tcagagtcaa acttcattgc 360
ttactccaaa cccagtttaa ttccccactt ttttaagtag gcttagcttt gagtgatttt 420
tggtataaac cgaaatgtaa atccaccttc aaacaacaaa gtttgacaag actgaaatgt 480
tactgaaaac aatggtgcca tatgtccaa agacatttcc ccaagataac tgccaaagag 540
tttttgagga ggacaatgat catttattat gtaggagcct tgatatctct gcaaaataga 600
attaatacag ctcaaattga gtagtaacca agcttttctg cccaggaagt aacaaacatc 660
actacgaaca tgagagtaca agaggaaact ttcataatgc attttttcat tcatacatc 720
attcaataaa cattagccaa gctaattgtc caagccactg tgccagggtat taacaatata 780
acaacaataa aagacacagt ccttctctc aaggtgttca gtctagtagg gaagatgatt 840
attcattaaa atttttggtg catcagaatc atgaggagct tgtcaaaaat gtaaattcct 900
gcctatgttc tcagatatc tgggttaggtc aggagtggga acccaaaatc aattctttta 960
acaaacacta aaggtgattc taacacaggc ggtgtgagga cc

```

1002

&lt;210&gt; 15

&lt;211&gt; 280

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 15

```

cgaggtgggc caccctgtgc tggctctgaga tttttaaatg aggattacat tatectatct 60
ataatattcc tattctaatc tattgtattc ttacaattaa atgtatcaaa taattcttaa 120
aacattattt agaaacaaac tgcctaatac cttataagac taaaaaaatc accaagatga 180
aactgtatta tgactctcaa tatttaaaca tttaaaaaaa tgttagtggt tgtaagcac 240
caatcttaac tatttcacct gcccgggcgg ccgctcgagg                280

```

&lt;210&gt; 16

&lt;211&gt; 2041

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 16

```

ccccccgcag aactcccccc tggaaatagga tttttaaaac ccttgacaat tagaaatcct 60
atagaggtta gcatttttta ggtaaaaata tgggtgcccc tacagggatc atgcaacttc 120
cttaaaacca attcagcaca tatgtataaa gaaccctttt taaaaacatt tgtacttgaa 180
atacagacac agtgatgctg aagacactaa acaaaaactg aaaagtacta taccttgata 240
aattttgtta ttgccttctt tagagacttt ataatctcta gttgattttc aaggacttga 300
atttaataat ggggtaatta cacaagacgt aaaggatttt taaaaacaa gtattttttt 360
ttacctctag catcaattct tttataaaga atgctaaata aattacattt tttgttcagt 420
aaaactgaag atagaccatt taaatgcttc taccaaattt aacgcagctt aattagggac 480
caggtacata ttttcttctg aacatTTTTt gtcaagcatg tctaaccata aaagcaaatg 540
gaattttaag aggtagattt tttttccatg atgcattttg ttaataaatg tgtcaagaaa 600
ataaaaacaa gcactgagtg tgttctcttg aagtataagg gtctaataaa aaataaaaga 660
tagatatttg ttatagtctg acattttaac agtcatagta ttagacgttt cgtgaccagt 720
gcatttttga ctctctcagg atcaaaaatac gagtctgccca actgtattaa atcctctctc 780
acccctcca ccagttgggc cacagcttcc tgggtgggtc ttgtcatcaa atccattggg 840
ccgaaatgaa catgaagcag atgcagcttg gagggccggg gctcgagcat tcaactcttg 900
ttcctgtaa tatagtttat tgtcttttgt tatagcatcc ataagttctt tctgtagagg 960
tgggtctcca tttatccaga gtccactggg tgggttatta ccacttaaac cattagtact 1020
atgctgtttt ttatacaaaa gcacataaag tgtgtccttt ggaaacctgc tctgtaattt 1080
ctggactgac tgaaatgaag taaatgtcac tctactgtca ttaaataaaa acccattctt 1140
ttgacatttc cttattttcc aaatcctgtt caaaaactgc actgggacta tctctcccta 1200
gtaaatgact ctgggaggat gctaagtcca gagcctcaga ctgggtggtc atctgatatg 1260
aagagtctgt acttgtgata tttctggcat aagaatagta atgcccactt tcagaggata 1320
taccagagtg aaccacaacg gaacttaata gatagggcac caattttgtg caggaaactt 1380
catcagtccc tgaaggcttt aatttttttag caaggttctc actaagatca gtgaagtcaa 1440
catctacaga ccaactttct gacaatgaag agaaagaagt aattcttcta actggcaact 1500
ccaaaaccag tggccagtga tacattgtct aaaattttcc ttctcacatg atacttctga 1560
tcatatgaaa atctcaggag agtaagaata aggtattcag gttcctccgt gatttgcata 1620
gttttctcag cattttgcag agaggcacag ttttcacaat aatattgggt atcaccagta 1680
agaatctctg gagcccaaaa aataatttag taagtcagtt actgaagggt tggtttcacc 1740
tcccggtttc tgaggtacat ctttattaac aagaatcttg ttagattcgt tagggacaga 1800
agtgttttca gaacagtaaa actcattagg aggactgcct atgggttttt cattcacaag 1860
tgagtcacag atgaaggcag ctggtgttgg attataaact actggctctt ctgaaggacc 1920
gggtacagac gcttgcatga gaccaccatc ttgtatactg ggtgatgatg ctggatcttg 1980
gacagacatg ttttccaaag aagaggaagc acaaaacgca agcgaaagat ctgtaaaggc 2040
t                                                    2041

```

&lt;210&gt; 17

&lt;211&gt; 235

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 17

```

cgccccgggc aggtgtcagg gggtccaaac cagcctgggg aaacacagcg tagacccttc 60
acctctacaa ataaaaaatt aaaaaattag ccaggtgtgg cagcgaacaa ctgtagtctc 120
agatactcag gagactgagc tggaaaggat cacttgagcc caagaagttc aaggttacag 180

```



tggggccacga tcatgtcatt acactccagc ttgggtgaca aaatgagact gtcta 235

<210> 18

<211> 2732

<212> DNA

<213> Homo sapiens

<400> 18

```

gtgtggagtt tcagctgcta ttgactataa gagctatgga acagaaaaag cttgctggct 60
tcatgttgat aactacttta tatggagctt cattggacct gttaccttca ttattctgct 120
aaatattatc ttcttgggtga tcacattgtg caaaatggtg aagcattcaa acactttgaa 180
accagattct agcagggttg aaaacattaa gtcttgggtg cttggcgctt tcgctcttct 240
gtgtcttctt ggctcacctt ggtccttttg gtgtcttttt attaatgagg agactattgt 300
gatggcatat ctcttcacta ttttaaatgc ttccaggga gtgttcattt tcatctttca 360
ctgtgctctc caaaagaaag tacgaaaaga atatggcaag tgcttcagac actcactctg 420
ctgtggaggc ctcccaactg agagtcccca cagttcagtg aaggcatcaa ccaccagaac 480
cagtgtctcg tattcctctg gcacacagag tcgtataaga agaattgtga atgatactgt 540
gagaaaacaa tcagaatctt cttttatctc aggtgacatc aatagcactt caacacttaa 600
tcaaggtggc ataaatctta atatattatt acaggactga catcacatgg tctgagagcc 660
catcttcaag atttatatca ttttagaggac attcactgaa caatgccagg gatacaagtg 720
ccatggatac tctaccgcta aatggtaatt ttaacaacag ctactcgctg cacaagggtg 780
actataatga cagcgtgcaa gttgtggact gtggactaag tctgaatgat actgcttttg 840
agaaaatgat catttcagaa ttagtgcaca acaacttacg gggcagcagc aagactcaca 900
acctcgagct cagctacca gtcaaacctg tgattggagg tagcagcagt gaagatgatg 960
ctattgtggc agatgcttca tctttaatgc acagcgacaa cccagggtg gagctccatc 1020
acaaagaact cgaggcacca cttattcctc agcggactca ctcccttctg taccaacccc 1080
agaagaaagt gaagtccgag ggaactgaca gctatgtctc ccaactgaca gcagaggctg 1140
aagatcacct acagtcccc aacagagact ctctttatc aagcatgcc aatcttagag 1200
actctcccta tccggagagc agccttgaca tggagaaga cctctctccc tccaggagga 1260
gtgagaatga ggacatttac tataaaagca tgccaaatct tggagctggc catcagcttc 1320
agatgtgcta ccagatcagc aggggcaata gtgatggtta tataatcccc attaacaaaag 1380
aagggtgat tccagaagga gatgttagag aaggacaaat gcagctggtt acaagtcttt 1440
aatcatagac ctaaggaatt ccaagggcca catgcgagta ttaataaata aagacaccat 1500
tggcctgacg cagctccctc aaactctgct tgaagagatg actcttgacc tgtggttctc 1560
tgggtgtaaaa aagatgactg aaccttgagc ttctgtgaat ttttataaaa catacaaaaa 1620
ctttgtatat acacagagta tactaaagtg aattatttgt tacaagaaa agagatgcca 1680
gccaggtatt ttaagattct gctgctgttt agagaaattg tgaaacaagc aaaacaaaac 1740
tttccagcca ttttactgca gcagtctgtg aactaaattt gtaaatatgg ctgcaccatt 1800
tttgtaggcc tgcattgtat tatatacaag acgtaggctt taaaatcctg tgggacaaat 1860
ttactgtacc ttactattcc tgacaagact tggaaaagca ggagagatat tctgcatcag 1920
tttgcagttc actgcaaact ttttacatta aggcaaatg tgaaaacatg ctttaaccact 1980
agcaatcaag ccacaggcct tatttcatat gtttcctcaa ctgtacaatg aactattctc 2040
atgaaaaatg gctaaaagaa ttatatattt ttctattgct agggtaaaat aaatacattt 2100
gtgtccaact gaaatataat tgtcattaaa ataattttta agagtgaaga aaatattgtg 2160
aaaagctctt ggttgacat gttatgaaat gttttttctt acactttgtc atggtaagtt 2220
ctactcattt tcaactcttt tccactgtat acagtgttct gctttgacaa agttagtctt 2280
tattacttac atttaaattt cttattgcca aaagaacgtg ttttatgggg agaaacaaac 2340
tctttgaagc cagttatgtc atgccttgca caaaagtgat gaaatctaga aaagattgtg 2400
tgtcaccctt gtttattctt gaacagaggg caaagagggc actgggcact tctcacaaac 2460
tttctagtga acaaaagggt cctattcttt tttaaaaaaa taaaataaaa cataaatatt 2520
actcttccat attccttctg cctatattta gtaattcaatt tattttatga taaagtctta 2580
ttaataatga aattgtttca gcaaaattct gctttttttt catccctttg tgtaaacctg 2640
ttaataatga gccatcact aatatccagt gtaaagttta acacggtttg acagtaataa 2700
aatgtgaatt. ttttcaagtt aaaaaaaaaa aa 2732

```

<210> 19

<211> 276

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 19

```
ctccctaaat gatttttaaaa taaattggat aaacatatga tataaagtgg gtacttttaga 60
aaccgccttt gcatatttttt tatgtacaaa tctttgtata caattccgat gttccttata 120
tattccctat atagcaaacc aaaaccagga cctcccaact gcatgcctca agtcctctgtg 180
gagcactctg gcaactggat ggccctactt gctttctgac aaaatagctg gaaaggagga 240
gggaccaatt aaatacctcg gccgcgacca cgctgg 276
```

&lt;210&gt; 20

&lt;211&gt; 2361

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 20

```
attgtaccag ccttgatgaa cgtggggcct gcttcgcttt tgaggggccat aagctcattg 60
cccactgggt tagaggctac cttatcattg tctcccgta ccggaagggt tctcccaagt 120
cagagtttac cagcagggat tcacagagct ccgacaagca gattctaaac atctatgacc 180
tgtgcaacaa gtatcatagcc tatagcaccg tctttgagga tgtagtggat gtgcttgctg 240
agtggggctc cctgtacgtg ctgacgcggg atgggcgggt ccacgcactg caggagaagg 300
acacacagac caaactggag atgctgttta agaagaacct atttgagatg gcgattaacc 360
ttgccaaagag ccagcatctg gacagtgtat ggctggccca gattttcatg cagtatggag 420
accatctcta cagcaagggc aaccacgatg gggctgtcca gcaatatatc cgaaccattg 480
gaaagttgga gccatcctac gtgatccgca agtttctgga tgcccagcgc attcacaacc 540
tgactgccta cctgcagacc ctgcaccgac aatccctggc caatgccgac cataccacc 600
tgctcctcaa ctgctatacc aagctcaagg acagctcgaa gctggaggag ttcatacaaga 660
aaaagagtga gagtgaagtc cactttgatg tggagacagc catcaagggt ctcgggcagg 720
ctggctacta ctcccatgcc ctgtatctgg cggagaacca tgcacatcat gagtggtaac 780
tgaagatcca gctagaagac attaagaatt atcaggaagc ccttcgatac atcggcaagc 840
tgcccttttga gcaggcagag agcaacatga agcgctacgg caagatcctc atgcaccaca 900
taccagagca gacaactcag ttgctgaagg gactttgtac tgattatcgg cccagcctcg 960
aaggccgcag cgatagggag gccccaggct gcaggggcca ctctgaggag ttcatcccca 1020
tctttgcca taaccgcga gagctgaaag ccttcttaga gcaatgagt gaagtgcagc 1080
cagactcacc ccaggggatc tacgacacac tctttgagct gcgactgcag aactgggccc 1140
acgagaagga tccacaggct aaagagaagc ttcacgcaga ggccatttcc ctgctgaaga 1200
gtggctcgct ctgacgagtc tttgacaagg ccttggctct gtgccagatg cacgacttcc 1260
aggatgggtg cctttacctt tatgagcagg ggaagctgtt ccagcagatc atgcactacc 1320
acatgcagca cgagcagtag cggcaggtca tcagcgtgtg tgagcgccat ggggagcagg 1380
accctcctt gtgggagcag gccctcagct acttcgctcg caaggaggag gactgcaagg 1440
agtatgtggc agctgtcctc aagcatatcg agaacaagaa cctcatgcc cctcttctag 1500
tgggtgcagac cctggcccac aactccacag ccacactctc cgtcatcagg gactacctgg 1560
tccaaaaact acagaaacag agccagcaga ttgcacagga tgagctgcgg gtgcccgggt 1620
accgagagga gaccaccgt atccgccagg agatccaaga gctcaaggcc agtcctaaga 1680
ttttccaaaa gaccaagtgc agcatctgta acagtgcctt ggagttgcc tcagtcact 1740
tctgtgtgg cactccttc caccaacact gctttgagag ttactcggaa agtgatgctg 1800
actgccccac ctgcctccct gaaaaccgga aggtcatgga tatgatccgg gccaggaac 1860
agaaacgaga tctccatgat caattccagc atcagctcaa gtgctccaat gacagctttt 1920
ctgtgattgc tgactacttt ggagaggtg ttttcaacaa attgactctg ctgaccgacc 1980
ctcccacagc cagactgacc tccagcctgg aggtggggt gcaacgcgac ctactcatgc 2040
actccaggag gggcacttaa gcagcctgga ggaagatgtg ggcaacagt gaggaccaag 2100
agaacagaca caatgggacc tgggcgggcg ttacacagaa ggctggctga catgcccagg 2160
gtccactct catctaattg cacagccctc acaagactaa agcggaaact tttcttttcc 2220
ctggccttcc ttaattttaa gtcaagcttg gcaatccctt cctctttaac taggcagggt 2280
ttagaatcat ttccagatta atggggggga aggggaacct caggcaaacc tcctgaagtt 2340
ttggaaaaaa aagctgggtt c 2361
```

<210> 21  
 <211> 179  
 <212> DNA  
 <213> Homo sapiens

<400> 21  
 aggtgttaga tgctcttgaa aaagaaactg catctaagct gtcagaaatg gattctttta 60  
 acaatcaact aaaggaactg agagaaacct acaacacaca gcagttagcc cttgaacagc 120  
 ttataagat caacgtgaca agttgaagga aattgaaagg aaaaaattag aactaatgc 179

<210> 22  
 <211> 905  
 <212> DNA  
 <213> Homo sapiens

<400> 22  
 tttttttttt ttctttaacc gtgtggtctt tatttcagtg ccagtgttac agatacaaca 60  
 caaatgttcc agttagaagg aattcaaacg gaatgccaag gtccaagcca ggctcaagaa 120  
 ataaaaaggg aggtttggag taatagataa gatgactcca atactcactc ttccctaaggg 180  
 caaagggtact tttgatcacag agtctgatct ttgaaactgg tgaactcctc ttccacccat 240  
 taccatagtt caaacaggca agttatgggc ttaggagcac tttaaaattt gtggtgggaa 300  
 tagggctcatt aataactatg aatatactt ttagaagggt accattttgc actttaagg 360  
 gaatcaattt tgaaaatcat ggagactatt catgactaca gctaaagaat ggcgagaaag 420  
 gggagctgga agagccttgg aagtttctat tacaaaataga gcaccatata cttcatgcca 480  
 aatctcaaca aaagctcttt ttaactccat ctgtccagtg tttacaaata aactcgcaag 540  
 gtctgaccag ttcttggtta caaacatata tgtgtgtgtc tgtgtgtata cagcaatgca 600  
 cagaaaaggc taccaggagc ctaatgcctc tttcaaacat tgggggaacc agtagaaaaa 660  
 ggcagggctc cctaattgtc attattacat ttccattccg aatgccagat gttaaaagt 720  
 cctgaagatg gtaaccacag tagtgaggaa taaatacccc accttgcccc gtccacagag 780  
 aaacaacagt agaaagaagg ggcaactctt tgctgcagag acaaagtgag tgttttttcg 840  
 ccatggattg cagtcctctc ctccagacca gctgcttatt tcctcagggg cccagggaat 900  
 gttga 905

<210> 23  
 <211> 2134  
 <212> DNA  
 <213> Homo sapiens

<400> 23  
 ggtctcttct ttcttttttt tttttccaaa agtgttcttt tatttctagt aacatatatt 60  
 gtataaatac tctattttat atgcacttcc acaaaagcga tataatttaa aagttttttt 120  
 cattagaaat aaatgtataa aaataaatat gttattatag gcattttatta ctaactatag 180  
 tccttcttgg aaggaacacc caaaccaata cttataaagt acatgtaatt tatagtaaca 240  
 tattttacta tatacatatg gaaaaaatca tattctcaca gaagagctga acagacattc 300  
 accaggatac gactgttgga ccagctgctg gagatggacc tgctaccctt cagcagcctc 360  
 cccaccacaa gacaagtgat ctcaatgtcc ccaaacctgt gggaccctgt tctacacacc 420  
 tcatttttgt tccggcgttt catcctcctt gtgtgattgt actgattttc atgagacaca 480  
 agttacttct ttacatccat attcccaaag cagggttaca tggtaggaaa gaaaggaagt 540  
 tggaggtaact aagctcattg tgtctcctct agcttttacc agcatctaatt gcttcactgc 600  
 tttttttcca ttgtagactt taatgcactt gaataaatac atggagttgt tttttcctca 660  
 aaatgaatta cacaaataaa gactgagatg gtccaaaaaa ggaaagagga agccatttgc 720  
 gttatttcac gttgctgagc cttctctca tgttgaacaa tctgaagttt taattctcgg 780  
 tagaaataat gtataaacat tctctgaaac catagcagcc ataaacagtg ctggctaaag 840  
 atcctatttg tactcctttc tccccccatt gttagtggg taaagtaaaa caggctctag 900  
 taaaatctca cttttctcct acttttctatt tcccaacccc catgatacta agtatttgat 960  
 aagtaccagg aaacaggggt tgtaatatgt ctaacttttt ttgacaattg ctttgttttt 1020  
 tctaaacttg taatagatgt aacaaaagaa ataataataa taatgcccgg ggctttatta 1080  
 tgctatatca ctgctcagag gtttaataatc ctcactaact atcctatcaa atttgcaact 1140

```

ggcagttttac tctgatgatt caactccttt tctatctacc cccataatcc cacccttactg 1200
atacacctca ctggttactg gcaagatacg ctggatccct ccagccttct tgctttccct 1260
gcaccagccc ttctctactt tgcttgccc tcaaagctaa caccacttaa accacttaac 1320
tgcattctgc cattgtgcaa aagtctatga aatgtttagg tttctttaaa ggatcacagc 1380
tctcatgaga taacaccctt ccatcatggg acagacactt caagcttctt tttttgtaac 1440
ccttcccaca ggtcttagaa catgatgacc actccccag ctgccactgg gggcagggat 1500
ggtctgcaca aggtctgggt ctggctgggt tcacttcctt tgcacactcg gaagcaggct 1560
gtccattaat gtctcgccat tctaccagtc ttctctgcca acccaattca catgacttag 1620
aacattcgcc ccactcttca atgacccatg ctgaaaaagt ggggatagca ttgaaagatt 1680
ccttcttctt ctttacgaag taggtgtatt taattttagg tgaaggga ttgccacag 1740
taagaacctg gatggtcaag ggctctttga gagggctaaa gctgcgaatt ctttccaatg 1800
ccgcagagga gccgctgtac ctcaagacaa cacttttgta cataatgtct tgctctaagg 1860
tggacaaagt gtagtcacca ttaagaatat atgtgccatc agcagctttg atggcaagaa 1920
agctgccatt gtctctggat cccctctggg tccgctgttt cacttcgatg ttggtggctc 1980
cagttggaat tgtgatgata tcatgatata caggttttgc actagtaact gatcctgata 2040
tttttttaca agtagatcca tttccccgc aaacaccaca tttatcaaac ttctttttgg 2100
agtctatgat gcgatcacia ccagctttta caca 2134

```

&lt;210&gt; 24

&lt;211&gt; 1626

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 24

```

ggacaatttc tagaatctat agtagtatca ggatatattt tgcttttaaaa tatatttttg 60
ttattttgaa tacagacatt ggctccaaat tttcatcttt gcacaatagt atgacttttc 120
actagaactt ctcaacattt gggaaactttg caaatatgag catcatatgt gtttaaggctg 180
tatcatttaa tgctatgaga tacattgttt tctccctatg ccaaacaggt gaacaaacgt 240
agttgttttt tactgatact aaatgttggc tacctgtgat tttatagtat gcacatgtca 300
gaaaaaggca agacaaatgg cctctgtgac tgaatacttc ggcaaactta ttgggtcttc 360
atcttctgac agacaggatt tgactcaata tttgtagagc ttgcgtagaa tggattacat 420
ggtagtgatg cactggtaga aatgggtttt agttattgac tcagaattca tctcaggatg 480
aatcttttat gtctttttat tgtaagcata tctgaattta ctttataaag atggtttttag 540
aaagctttgt ctaaaaattt ggcctaggaa tggttaacttc attttcagtt gccaaaggggt 600
agaaaaataa tatgtgtggt gttatgttta tgttaacata ttattaggta ctatctatga 660
atgtatttaa atatttttca tattctgtga caagcattta taatttgcaa caagtggagt 720
ccatttagcc cagtgggaaa gtcttggaaac tcaggttacc cttgaaggat atgctggcag 780
ccatctcttt gatctgtgct taaactgtaa tttatagacc agctaaatcc ctaacttgga 840
tctggaatgc attagttatg ccttgtagca tttccagaat ttcaggggca tcgtgggttt 900
ggctagtga ttgaaaacac aagaacagag agatccagct gaaaaagagt gatcctcaat 960
atcctaacta actggtcctc aactcaagca gagtttcttc actctggcac tgtgatcatg 1020
aaacttagta gaggggattg tgtgtatttt atacaaattt aatacaatgt cttacattga 1080
taaaattctt aaagagcaaa actgcatttt atttctgcat ccacattcca atcatattag 1140
aactaagata tttatctatg aagatataaa tgggtgcagag agactttcat ctgtggattg 1200
cgttgtttct tagggttcct agcactgatg cctgcacaag catgtgatat gtgaaataaa 1260
atggattctt ctatagctaa atgagttccc tctggggaga gttctgggtac tgcaatcaca 1320
atgccagatg gtgtttatgg gctatttgtg taagtaagtg gtaagatgct atgaagtaag 1380
tgtgtttgtt tcatcttat ggaaactctt gatgcatgtg cttttgtatg gaataaattt 1440
tggtgcaata tgatgtcatt caactttgca ttgaattgaa ttttggttgt atttatatgt 1500
attatacctg tcacgcttct agttgcttca accattttat aaccattttt gtacatatat 1560
tacttgaaaa tatttttaaat ggaaatttaa ataaacattt gatagtttac ataataaaaa 1620
aaaaaa 1626

```

&lt;210&gt; 25

&lt;211&gt; 1420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 25

```

gttcagcatt gtttctgctt ctgaaatctg tatagtacac tggtttgtaa tcattatgtc 60
ttcattgaaa tccttgctac ttctcttctt cctcaatgaa agacacgaga gacaagagcg 120
acacaagctt aagaaaaaacg agcaaggaag agtatcttca ttattctcat ttctctgag 180
ttggaaacaa aaacatgaag gactccaact agaagacaga tatttacatt taaatagatt 240
agtgggaaaa ctttaagagt tccacatat tagttttcat tttttgagtc aagagactgc 300
tccttgtaact gggagacact agtagtatat gtttgtaatg ttactttaaa attatctttt 360
tattttataa ggcccataaa tactgggttaa actctgttaa aagtgggcct tctatcttgg 420
atgggtttcac tgccatcagc catgctgata tattagaaat ggcaccccta tctacttact 480
ttaatgctta aaattataca taaaatgctt tatttagaaa acctacatga tacagtgggtg 540
tcagccttgc catgtatcag tttcacttga aatttgagac caattaaatt tcaactgttt 600
agggtggaga aagagggtact ggaaaacatg cagatgagga tatcttttat gtgcaacagt 660
atcctttgca tgggaggaga gttactcttg aaaggcaggc agcttaagtg gacaatgttt 720
tgtatatagt tgagaatttt acgacacttt taaaaattgt gtaattgtta aatgtccagt 780
tttgctctgt tttgcctgaa gtttttagtat ttgttttcta ggtggacctc tgaaaaccaa 840
accagtacct ggggagggtta gatgtgtgtt tcaggcttgg agtgtatgag tgggttttgc 900
tgtattttcc tccagagatt ttgaacttta ataattgcgt gtgtgttttt ttttttttaa 960
gtggctttgt ttttttttct caagtaaaat tgtgaacata tttcttttat aggggcaggg 1020
catgagttag ggagactgaa gagtattgta gactgtacat gtgccttctt aatgtgtttc 1080
tcgacacatt ttttttcagt aacttgaaaa ttcaaaaagg acatttgggt aggttactgt 1140
acatcaatct atgcataaat ggcagcttgt tttcttgagc cactgtctaa attttgtttt 1200
tatagaaatt ttttatactg attggttcat agatggtcag ttttgtaac agactgaaca 1260
atacagcact ttgccaaaaa tgagtgtagc attgtttaaa cattgtgtgt taacacctgt 1320
tctttgtaat tgggttgtgg tgcattttgc actacctgga gttacagttt tcaatctgtc 1380
agtaaaaaaa gtgtccttta acttcaaaaa aaaaaaaaaa 1420

```

&lt;210&gt; 26

&lt;211&gt; 689

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 26

```

aaacaaacaa aaaaaaagtt agtactgtat atgtaaatac tagcttttca atgtgctata 60
caaacaatta tagcacatcc ttctttttac tctgtctcac ctcttttagg tgagtacttc 120
cttaataaag tgctaaacat acatatacgg aacttgaaaag ctttggttag ccttgacctta 180
ggtaatcagc ctagttttaca ctgtttccag ggagtagttg aattactata aaccattagc 240
cacttgcttc tgcaccattt atcacaccag gacagggtct ctcaacctgg gcgctactgt 300
catttggggc caggtgatcc ttcttgcaa gggctgtcct gtacctgcc gggcgggcgc 360
tcgaagcgtg gtcgcggccg aggtactgaa aggaccaagg agctctggct gccctcagga 420
attccaaatg accgaaggaa caaagcttca gggctctggg tgggtgtctcc cactattcag 480
gaggtggctg gaggtaacgc agcttcattt cgtccagtc tttccagtat ttaaagttgt 540
tgtcaagatg ctgcattaaa tcaggcagg ctacaaaagg atcccaagca tcaaacatgt 600
ctgtgatgaa gtaatcaatg aaacaccgga acctccgacc acctcctgaa tagtgggaga 660
cacaccaga gcctgaagtt tgtccttcg 689

```

&lt;210&gt; 27

&lt;211&gt; 471

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 27

```

tcccagcggc atgaagtttg agattggcca ggcctgtgac ctgggcttca tctccttcgt 60
ccctctcgct cattgggtggc accctgcttt gcctgtcctg ccaggacgag gcacctaca 120
agccctaacc caggccccgc ccagggccac caccgacct gcaaacaccg cacctgccta 180
ccagccacca gctgcctaca aagacaatcg ggccttctca gtgacctcg ccaccacagc 240
gggtacaggc tgaacgacta cgtgtgagtc cccacagcct gcttctcccc tgggctgctg 300
tgggctggtt cccggcgga ctgtcaatgg aggcaggggg tccagcacia agtttacttc 360
tgggcaattt ttgtatccaa ggaaataatg tgaatgcgag gaaatgtctt tagagcacag 420

```

ggacagaggg ggaaataaga ggaggagaaa gctctctata ccaaagactg a 471

<210> 28

<211> 929

<212> DNA

<213> Homo sapiens

<400> 28

```

ggtgaactca gtgcattggg ccaatggttc gacacaggct ctgccagcca caaccatcct 60
gctgcttctg acggtttggc tgctgggtgg ctttccccctc actgtcattg gaggcattct 120
tggaagaac aacgccagcc cctttgatgc accctgtcgc accaagaaca tcgcccggga 180
gattccaccc cagccctggt acaagtctac tgtcatccac atgactgttg gaggcttcct 240
gcctttcagt gccatctctg tggagctgta ctacatcttt gccacagtat ggggtcggga 300
gcagtacact ttgtacggca tcctcttctt tgtcttcgcc atcctgctga gtgtgggggc 360
ttgcatctcc attgcactca cctacttcca gttgtctggg gaggattacc gctgggtggg 420
gcatctgtg ctgagtgttg gctccacggg cctcttcac ttcctctact cagttttcta 480
ttatgcccg cgctccaaca tgtctggggc agtacagaca gtagagtctt cggctactc 540
cttactcact ggttatgtct tcttctcat gctgggcacc atctcctttt tttcttcctt 600
aaagttcatc cggatatatc atgttaacct caagatggac tgagtctgt atggcagaac 660
tattgctgtt ctctcccttt cttcatgccc tgttgaactc tcctaccagc ttctcttctg 720
attgactgaa ttgtgtgatg gcattgttgc cttccctttt tccctttggg cattccttcc 780
ccagagaggg cctggaaatt ataaatctct atcacataag gattatata ttgaactttt 840
taagttgcct ttagttttgg tcctgatttt tctttttaca attacaaaaa taaaatttat 900
taagaaaaag aaaaaaaaaa aaaaaaaaaa 929

```

<210> 29

<211> 1775

<212> DNA

<213> Homo sapiens

<400> 29

```

gaacgtgatg ggaacttttg gaggatgtct gagaaaaatgt ccgaagggat tttggccaac 60
accagaaaaa gccaatgtcc taggaattcc ctcccaaat gcttcccaaa aaattactca 120
ttgacaattc aaattgcact tggctggcgg cagcccgggc ggccttcagt ccgtgtgggg 180
cgccgcgtg gccttctcct cgtaggactc cccaaactcg ttcactctgc gtttatccac 240
aggataaagc caccgctggt acaggtagac cagaaacacc acgtcgtccc ggaagcaggc 300
cagccggtga gacgtgggca tgggtgatgat gaaggcaaag acgtcatcaa tgaagggtgt 360
gaaagccttg taggtgaagg ccttccaggg cagatgtgcc actgacttca acttgtagtt 420
caciaagagc tggggcagca tgaagaggaa accaaaggca tagaccccg tgcgaagct 480
gttgattaac caggagtacc agctcttata tttgatattc aggagtgaat agacagcacc 540
cccagacag agaggggtaca gcaggatga caagtacttc atggcctgag tatcgtactc 600
ctcggttttc ctctcagatt cgctgtaagt gccaaactga aattcgggca tcaggcctct 660
ccaaaaata gtcacttcca atgccttctt cactttccac agtcaatgg cggctccaac 720
acccgcggg accagcacca gcaggctcgt ctgctcgtcc agcaggaaca gaaagatgac 780
cacggtgctg aagcagcgcc agagcactgc cttggtggac atgccgatca tgctcttctt 840
cttcttccag aaactgatgt cattttttaa ggccaggaaa tcaaagagaa gatggaacgc 900
tgcgacaaa aggtcagcg ccaggaagta taagttggta tctacaaaaa ttcctttcac 960
ctcatcagca tctttctctg aaaacccgaa ctgctgcagg gactacacgg cgtcctgcat 1020
gtggatccag aagcgcagcc gcccagtgta gaccttgtcg taggacacgg tgaggggcag 1080
ctcgggtggt gagcggttta tgaccatcag gtccttcacg cggttgctga gctggctgat 1140
gaacaggatg ggcaggtaat gcacggtttt cccagctgg atcatcttca tgtaccgatg 1200
cacatcgcca ggcaggagg acccgtaaaa gacaaagtta tccgccatca cgttcagcgc 1260
cagccgcggg gccagtggt acactggctc atccagggca ctgctcggct tcttctccgc 1320
ctcgatctgc tgtgtatcag actccccggt gagcaggttg atttcttctg gcttggggac 1380
catgtaggtg gtcagaggac tgaccaggtg cacctgcttc ccgtcgtgcc acggcaggac 1440
cccagcgtga tggaggaaga tgtaggcata cagcgtccca ttgtttctcg ttttctttgg 1500
tacagaaaca ttaactgtcc tttcaaattt ggactccaca tcaaagtctt ccacattcaa 1560
gaccaggtcg atgttgttct cagcaccacg gtgggacctc gtcgtggtgt acacgctcag 1620

```

ctgcagettg	ggccgcccgc	ccaggtaggg	ctggatgcag	ttggcgctgc	cggagcacgg	1680
gcggtgttag	acgatgccgt	acatgaccca	gcagggtgtg	accacgtaga	ccacgaacac	1740
gcccaccacc	aagctggtga	aggagctgcg	gcccc			1775

&lt;210&gt; 30

&lt;211&gt; 1546

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 30

aaaataagta	ggaatgggca	gtgggtattc	acattcacta	cacctttttcc	atttgcta	60
aaggccctgc	caggctggga	gggaattgtc	cctgcctgct	tctggagaaa	gaagatattg	120
acaccatcta	cgggcacccat	ggaactgctt	caagtgaacca	ttctttttct	tctgcccagt	180
atttgcagca	gtaacagcac	aggtgtttta	gaggcagcta	ataattcact	tggtgttact	240
acaacaaaac	catctataac	aacaccaaac	acagaatcat	tacagaaaaa	tggtgtcaca	300
ccaacaactg	gaacaactcc	taaaggaaca	atcaccaatg	aattacttaa	aatgtctctg	360
atgtcaacag	ctactttttt	aacaagtaaa	gatgaaggat	tgaaagccac	aaccactgat	420
gtcaggaaga	atgactccat	catttcaaac	gtaacagtaa	caagtgttac	acttccaaat	480
gctgtttcaa	cattacaaag	ttccaaaccc	aagactgaaa	ctcagagtcc	aattaaaaca	540
acagaaatac	caggtagtgt	tctacaacca	gatgcatacc	cttctaaaac	tggtacatta	600
acctcaatac	cagttacaat	tccagaaaac	acctcacagt	ctcaagtaat	aggcactgag	660
ggtggaaaaa	atgcaagcac	ttcagcaacc	agccggtctt	attccagtat	tattttgccc	720
gtggttattg	ctttgattgt	aataacactt	tcagtatttg	ttctggtggg	tttgtaccga	780
atgtgctgga	aggcagatcc	gggcacacca	gaaaatggaa	atgatcaacc	tcagtctgat	840
aaagagagcg	tgaagcttct	taccgttaag	acaatttctc	atgagctctg	tgagcactct	900
gcacaaggaa	aaaccaagaa	ctgacagctt	gagggaattct	ctccacacct	aggcaataat	960
tacgcttaat	cttcagcttc	tatgcaccaa	gcgtggaaaa	ggagaaagtc	ctgcagaatc	1020
aatcccgaact	tccatacctg	ctgctggact	gtaccagacg	tctgtcccag	taaagtgatg	1080
tccagctgac	atgcaataat	ttgatggaa	caaaaagaac	cccggggctc	tcctgttctc	1140
tcacatttaa	aaattccatt	actccattta	caggagcggt	cctaggaaaa	ggaatttttag	1200
gaggagaatt	tgtgagcagt	gaatctgaca	gcccaggagg	tggtctcgct	gataggcatg	1260
actttcctta	atgtttaaag	ttttccgggc	caagaatttt	tatccatgaa	gactttccta	1320
cttttctcgg	tggtcttata	ttacctactg	ttagtattta	ttgtttacca	ctatgttaat	1380
gcagggaaaa	ggtgcacgtg	tattattaaa	tattaggtag	aaatcatacc	atgctacttt	1440
gtacatatata	gtattttatt	cctgctttcg	tggtactttt	aataaataac	tactgtactc	1500
aatactctaa	aaatactata	acatgactgt	gaaaatggca	aaaaaa		1546

&lt;210&gt; 31

&lt;211&gt; 750

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 31

cacttgggca	ccccattttt	ctaaaaaaat	ggaaatctgg	agggcaaaaa	aggtgtgctg	60
aagggaagtg	cctctgatgg	cccaaaaacc	ttcttccaaa	ctagtgtagg	aatggaatgg	120
atagcaaatg	gacccctttt	ggcctccttt	ggagcatgcc	ttccctatct	tatccttggc	180
cccactaaag	cagaacgtta	cggatatttc	tggtttttg	attggatgcc	tatctggcca	240
aacagccttt	ccctaatttg	aaaatgcagt	cctgttttaa	acctttgatt	tacgactact	300
tgtacatgct	tgctcattac	aattttgaca	ttttttacat	agtgaagacc	ccaaacatat	360
cagtgaacaa	tgacaagatc	ataaagaaca	gtatcatatt	attattttagt	cgctttttaca	420
gtggcaagcc	aattttgaaa	tatctcattt	aaaactcaga	cccaattcac	tgagttatac	480
ttttaatatg	ttcctcagca	cactattttc	catgcattaa	atatgataaa	ataatctatc	540
actgccatc	ggctttgtaa	aaaggaagtc	tgaatacaga	gcccacaaca	ctaaaattgt	600
ttttctagct	acaaagtata	gcatcatcaa	cacagacacg	atttggaact	cctgacaggt	660
ggattggaaa	acggtgttta	aagagaagag	aacattttta	cataaatgtc	attaagaatc	720
ccaaaggcct	tattttgtcac	caccgtcccc				750

<210> 32  
 <211> 1620  
 <212> DNA  
 <213> Homo sapiens

<400> 32

```

gcaattcccc cctcccaacta aacgactccc agtaattatg tttacaaccc attggatgca 60
gtgcagccat tcataagaac cttgggtgccc cagaaaaatc tgcctttttt ggtaccaaac 120
ctgaggtctt ttggaagata atgtagaaaa ccactacctt ttgaaggcct gttttggcta 180
atctgtgcaa actctgatga tacctgcctt atgtggattc tttccacac tgctttcatt 240
tttaagtata aagacttaga aaactagaat aatgctttta caaataatta aaagtatgtg 300
atgttctggg ttttttcctt ctttttagaa ccccgctcc atttaaaaaa ttaaaaaaaa 360
aaaaaaaaact ttttaacattt aaaaaataaa aattaacaaa atttcactta ttccaggaca 420
cgctggcatt tggactcaat gaaaagggca cctaaagaaa ataaggctga ctgaatgttt 480
tccataattt tcacacaata acagtcctt tctatccagc ttgccttcca tttatctcta 540
gggttagctt ttcaggcaac atccttggtc attgcccaga aagtacctga gctatcagtg 600
attggaatgg cacaggaaac cgaatcacat ggggtgccctc cccttggttt tcaagtatct 660
tgaggtttgt caaaaaaatt aggtcatgcc ttcagtgtct tggtctttaa acctaccctt 720
tgacaatcag gtgctaata ttgtatacta ttaaaaccag cacataagta ttgtaaatgt 780
gtgttcctcc taggttgga gaaatgtctt tcttctatc tgggtcctgt taaagcgggt 840
gtcagttgtg tcttttcacc tcgatttgtg aattaataga attgggggga gaggaaatga 900
tgatgtcaat taagtttcag gtttggcatg atcatcattc tcgatgatat tctcactttg 960
tcgcaaactt gcccttatcg taagaacaag tttcagaatt ttccctccac tatacgactc 1020
cagtattatg tttacaatcc attggatgag tgcagcatta taagaccttg gtgccagaa 1080
aaatctgtcc tttttggtac caaacctgag gtcttttggg agataatgta gaaaaccact 1140
acctattgaa ggcctgtttt ggctaactct tgcaaaactct gatgatacct gcttatgttg 1200
attcttttcc acactgcttt catttttaag tataaagact tagaaaacta gaataatgct 1260
tttacaataa attaaaagta tgtgatgttc tgggtttttt ccttcttttt agaaccctgt 1320
atttaaacaa gccttctttt taagtcttgt ttgaaattta agtctcagat cttctggata 1380
ccaaatcaaa aacccaacgc gtaaaacagg gcagtatttg tggtccta at tttaaaaagc 1440
tttatgtata ctctataaat atagatgcat aaacaacact tccccttgag tagcacatca 1500
acatacagca ttgtacatta caatgaaaat gtgtaactta agggatttat atatataaat 1560
acatatatac ctttgaatac tttatactgt aaataaaaaa gttgcttttag tcaaaaaaaa 1620

```

<210> 33  
 <211> 2968  
 <212> DNA  
 <213> Homo sapiens

<400> 33

```

gaaaaagtag aaggaaacac agttcatata gaagtaaaag aaaaccctga agaggaggag 60
gaggaggaag aagaggaaga agaagatgaa gaaagtgaag aggaggagga agaggaggga 120
gaaagtgaag gcagtgaagg tgatgaggaa gatgaaaagg tgcagatga gaaggattca 180
gggaagacat tagataaaaa gccaaagtaa gaaatgagct cagattctga atatgactct 240
gatgatgatc ggactaaaaga agaaagggtc tatgacaaaag caaaacggag gattgagaaa 300
cggcgacttg aacatagtaa aaatgtaaac accgaaaagc taagagcccc tattatctgc 360
gtacttgggc atgtggacac agggaagaca aaaattctag ataagctccg tcacacacat 420
gtacaagatg gtgaagcagg tggatcaca caacaaattg gggccaccaa tgttcctctt 480
gaagctatta atgaacagac taagatgatt aaaaattttg atagagagaa tgtacggatt 540
ccagggaatgc taattattga tactcctggg catgaatctt tcagtaatct gagaaataga 600
ggaagctctc tttgtgacat tgccatttta gttgttgata ttatgcatgg tttggagccc 660
cagacaattg agtctatcaa ctttctcaaa tctaaaaaat gtcccttcat tgttgcactc 720
aataagattg ataggttata tgattggaaa aagagtcctg actctgatgt ggctgctact 780
ttaagaagac agaaaaagaa tacaaaagat gaatttgagg agcgagcaaa ggctattatt 840
gtagaatttg cacagcaggg tttgaatgct gctttgtttt atgagaataa agatccccgc 900
acttttgtgt ctttgggtacc tacctctgca catactgggtg atggcatggg aagtctgata 960
taccttcttg tagagttaac tcagaccatg ttgagcaaga gacttgcaca ctgtgaagag 1020
ctgagagcac aggtgatgga gggttaaagct ctcccgggga tgggcaccac tatagatgtc 1080

```



atcttgatca	atgggcggtt	gaaggaagga	gatacaatca	ttgttcctgg	agtagaaggg	1140
cccatgttaa	ctcagattcg	aggcctcctg	ttacctcctc	ctatgaagga	attacgagtg	1200
aagaaccagt	atgaaaagca	taaagaagta	gaagcagctc	agggggtaaa	gattccttga	1260
aaagacctgg	agaaaacatt	ggctgggtta	ccccctcttg	tggcttataa	agaagatgaa	1320
atccctgttc	ttaaagatga	attgatccat	gagttaaagc	agacactaaa	tgctatcaaa	1380
ttagaagaaa	aaggagtcta	tgtccaggca	tctacactgg	gttccttggg	agctctactg	1440
gaattttctga	aaacatcaga	agtgccttat	gcaggaatta	acattggccc	agtgcataaa	1500
aaagatgtta	tgaaggcttc	agtgatgttg	gaacatgacc	ctcagtatgc	agtaattttg	1560
gccttcgatg	tgagaattga	acgagatgca	caagaaatgg	ctgatagttt	aggagttaga	1620
atTTTTtagtg	cagaaattat	ttatcattta	tttgatgcct	ttacaaaata	tagacaagac	1680
tacaagaaac	agaaacaaga	agaatttaag	cacatagcag	tatttccctg	caagataaaa	1740
atcctccctc	agtacatttt	taattctcga	gatccgatag	tgatgggggt	gacgggtggaa	1800
gcagggtcag	tgaaacaggg	gacaccctag	tgtgtcccaa	gcaaaaattt	tgttgacatc	1860
ggaatagtaa	caagtattga	aataaaacct	aaacaagtgg	atgttgcaaa	aaaaggacaa	1920
gaagtttctg	taaaaataga	acctatccct	ggtagtcac	ccaaaatggt	tggaaagacat	1980
tttgaagcta	cagatattct	tgttagtaag	atcagccggc	agtccattga	tgcactcaaa	2040
gactgggttca	gagatgaaat	gcagaagagt	gactggcagc	ttattgtgga	gctgaagaaa	2100
gtatttgaaa	tcatctaatt	ttttcacatg	gagcaggaac	tggagtaaat	gcaatactgt	2160
gttgtaatat	cccaacaaaa	atcagacaaa	aaatggaaca	gacgtatttg	gacactgatg	2220
gacttaagta	tggaaggaag	aaaaataggt	gtataaaatg	ttttccatga	gaaaccaaga	2280
aacttacact	ggtttgacag	tggtcagtta	catgtcccca	cagttccaat	gtgcctgttc	2340
actcacctct	cccttcccca	acccttctct	acttggctgc	tgttttaaa	tttgcccttc	2400
cccaaatattg	gatttttatt	acagatctaa	agctctttcg	attttatact	gattaaatca	2460
gtactgcagt	atttgattaa	aaaaaaaaaa	gcagattttg	tgattcttgg	gacttttttg	2520
acgtaagaaa	tacttcttta	tttatgcata	ttcttcccac	agtgattttt	ccagcattct	2580
tctgccatat	gccttttaggg	cttttataaa	atagaaaatt	aggcattctg	atatttcttt	2640
agctgctttg	tgtgaaacca	tgggtgtaaa	gcacagctgg	ctgcttttta	ctgcttgtgt	2700
agtcacgagt	ccattgtaat	catcacaatt	ctaaaccaaa	ctaccaataa	agaaaacaga	2760
catccaccag	taagcaagct	ctgttaggct	tccatggtta	gtggtagctt	ctctcccaca	2820
agttgtcctc	ctaggacaag	gaattatctt	aacaaactaa	actatccatc	acactacctt	2880
ggtatgccag	cacctgggta	acagtaggag	attttataca	ttaatctgat	ctgtttaatc	2940
tgatcggttt	agtagagatt	ttatacat				2968

&lt;210&gt; 34

&lt;211&gt; 6011

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 34

acggggcgcc	ggacgacccg	cacatcttat	cctccacgcc	ccactcgcac	tccgagcggg	60
accgccccgg	actccccctc	gggcccggca	ctcgaggagt	gaggagagag	gccgcccggc	120
cggcttgagc	cgagcgagc	accccccgcg	ccccgcgcca	gaagtttggt	tgaaccgggc	180
tgccgggaga	aacttttttc	ttttttcccc	ctctcccggg	agagtctctg	gaggagggag	240
ggaactcccc	cggcccaagg	ctcgtgggct	cggggtcgcg	cggccgcaga	aggggcccggg	300
tccgccccgc	aggggaggcg	cccccgggga	cccagagggg	gggtgaggac	cgcgggctgc	360
tgggtgcggc	gcggcagcgt	gtgccccgcg	caggggaggc	gccgccccgc	tcccggcccc	420
gctgcgagga	ggaggcggcg	gcggcgagag	aggatgtact	tgggtggcggg	ggacaggggg	480
ttggccggct	gcgggcacct	cctgggtctcg	ctgctggggc	tgctgctgct	gccggcgcg	540
tccggcaccc	gggcgctggt	ctgcctgcc	tgtgacgagt	ccaagtgcga	ggagcccagg	600
aaccgcccgg	ggagcatcgt	gcagggcgtc	tgcggctgct	gctacacgtg	cgcagccag	660
gggaacgaga	gctgcggcgg	caccttcggg	attttacggaa	cctgcgaccg	ggggctgctg	720
tgtgtcatcc	gcccccgct	caatggcgac	tccctcaccc	agtacgaagc	gggcgtttgc	780
gaagatgaga	actggactga	tgaccaactg	cttgggttta	aaccatgcaa	tgaaaacctt	840
attgctggct	gcaatataat	caatgggaaa	tgtgaatgta	acaccattcg	aacctgcagc	900
aatccctttg	agtttccaag	tcaggatatg	tgcctttcag	ctttaaagag	aattgaagaa	960
gagaagccag	attgctccaa	ggccccgtgt	gaagtccagt	tctctccacg	ttgtcctgaa	1020
gattctgttc	tgatcgaggg	ttatgctcct	cctggggagt	gctgtccctt	accagccgc	1080
tgcgtgtgca	accccgacgg	ctgtctgcgc	aaagtctgcc	agccgggaaa	cctgaacata	1140

ctagtgtcaa	aagcctcagg	gaagccggga	gagtgtgtgt	acctctatga	gtgcaaacca	1200
gttttccggc	tggactgcag	gactgtggaa	tgccctactg	ttcagcagac	cgctgtctcc	1260
ccggacagct	atgaaactca	agtcagacta	actgcagatg	gttgctgtac	tttgccaaca	1320
agatgcgagt	gtctctctgg	cttatgtggg	ttccccgtgt	gtgagggtgg	atccactccc	1380
cgcatagtct	ctcgtggcga	tgggacacct	ggaaaagtgc	gtgatgtctt	tgaatgtgtt	1440
aatgatacaa	agccagcctg	cgattttaac	aatgtggaat	attatgatgg	agacatgttt	1500
cgaatggaca	actgtcgggt	ctgtcgatgc	caagggggcg	ttgccatctg	cttcaccgcc	1560
cagtgtgggt	agataaactg	cgagaggtac	tacgtgcccc	aaggagagtg	ctgcccagtg	1620
tgtgaagatc	cagtgtatcc	ttttaataat	cccgtgtggc	gctatgccaa	tggcctgac	1680
cttgcccacg	gagaccgggt	gcgggaagac	gactgcacat	tctgccagtg	cgtaaacggt	1740
gaacgccact	gcgttgccgac	cgctctgcga	cagacctgca	caaaccctgt	gaaagtgcct	1800
ggggagtggt	gccctgtgtg	cgaagaacca	accatcatca	cagttgatcc	acctgcatgt	1860
ggggagttat	caaactgcac	tctgacacgg	aaggactgca	ttaatgggtt	caaacgcgat	1920
cacaatgggt	gtcggacctg	tcagtgcata	aacaccaggg	aactatgttc	agaacgtaaa	1980
caaggctgca	ccttgaactg	tcccttcggt	ttccttactg	atgccccaaa	ctgtgagatc	2040
tgtgagtgcc	gccccaggcc	caagaagtgc	agaccataaa	tctgtgacaa	gtattgtcca	2100
cttggaattg	tgaagaataa	gcacggctgt	gacatctgtc	gctgtaagaa	atgtccagag	2160
ctctcatgca	gtaagatctg	ccccttgggt	ttccagcagg	acagtcacgg	ctgtcttatc	2220
tgaagtgcac	gagaggcctc	tgcttcagct	gggcccacca	tctgttcggg	cacttgtctc	2280
accgtggatg	gtcatcatca	taaaaatgag	gagagctggt	acgatgggtg	ccgggaatgc	2340
tactgtctca	atggacggga	aatgtgtgct	ctgatcacct	gcccgggtgc	tgcctgtggc	2400
aacccccacca	ttcaccctgg	acagtgtctg	ccatcatgtg	cagatgactt	tgtgggtgcg	2460
aagccagagc	tcagtactcc	ctccatttgc	cacgccccct	gaggagaata	ctttgtggaa	2520
ggagaaacgt	ggaacattga	ctcctgtact	cagtgcacct	gccacagcgg	acgggtgctg	2580
tgtgagacag	aggtgtgccc	accgctgctc	tgccagaacc	cctcacgcac	ccaggattcc	2640
tgctgcccac	agtgtacaga	tcaacctttt	cggccttcc	tgtcccgcaa	taacagcgta	2700
cctaattact	gcaaaaatga	tgaaggggat	atattcctgg	cagctgagtc	ctggaagcct	2760
gacgtttgta	ccagctgcat	ctgcattgat	agcgttaatta	gctgtttctc	tgagtcctgc	2820
ccttctgtat	cctgtgaaag	acctgtcttg	agaaaaggcc	agtgttgtcc	ctactgcata	2880
aaagacacaa	ttccaaagaa	ggtgggtgtg	cacttcagtg	ggaaggccta	tgccgacgag	2940
gagcgggtgg	accttgacag	ctgcacccac	tgctactgcc	tgcagggccca	gaccctctgc	3000
tgcaccgtca	gctgcccccc	tctgcctgtg	gttgagccca	tcaacgtgga	aggaagttgc	3060
tgcccattgt	gtccagaaat	gtatgtccca	gaacataacca	atatacccat	tgagaagaca	3120
aacctcagag	gagagggtga	cctggagggt	ccccgtggc	ccacgcctag	tgaaaatgat	3180
atcgctccatc	tccctagaga	tatgggtcac	ctccaggtag	attacagaga	taacaggctg	3240
cacccaagtg	aagattcttc	actggactcc	attgcctcag	ttgtgggttc	cataattata	3300
tgctctctca	ttataatagc	attcctatcc	atcaatcaga	agaaacagtg	gataccactg	3360
ctttgtctgt	atcgaacacc	aactaagcct	tcttctctaa	ataatcagct	agtatctgtg	3420
gactgcaaga	aaggaaccag	agtccagggt	gacagttccc	agagaatgct	aagaattgca	3480
gaaccagatg	caagattcag	tggcttctac	agcatgcaaa	aacagaacca	tctacaggca	3540
gacaatttct	accaaacagt	gtgaagaaag	gcaactagga	tgaggtttca	aaagacggaa	3600
gacgactaaa	tctgtctctaa	aaagtaaaact	agaatttgtg	cacttgctta	gtggattgta	3660
ttggattgtg	acttgatgta	cagcgctaag	accttactgg	gatgggctct	gtctacagca	3720
atgtgcagaa	caagcattcc	cacttttcc	caagataaact	gaccaagtgt	tttcttagaa	3780
ccaaagtttt	taaagtgtgt	aagatatatt	tgctgtgaag	atagctgtag	agatatattg	3840
ggtggggaca	gtgagtttgg	atggggaaag	gggtgggagg	gtgggtgttg	gaagaaaaat	3900
tggtcagctt	ggctcgggga	gaaacctggt	aacataaaaag	cagttcagtg	gcccagagggt	3960
tatttttttc	ctattgtctc	gaagactgca	ctgggtgtctg	caaagctcag	gcctgaatga	4020
gcaggaaaca	aaaaaggcct	tgcgacccag	ctgccataac	caccttagaa	ctaccagacg	4080
agcacatcag	aaccttttga	cagccatccc	aggtctaaaag	ccacaagtgt	cttttctata	4140
cagtcaaac	tgcagtaggc	agtgaggaag	ccagagaaaat	gcgatagcgg	catttctcta	4200
aagcgggtta	ttaaggatat	atacagttac	acttttctgt	gcttttattt	tcttccaagc	4260
caatcaatca	gccagttcct	agcagagtca	gcacatgaac	aagatctaag	tcatttcttg	4320
atgtgagcac	tggagctttt	tttttttaca	acgtgacagg	aagaggaggg	agaggggtgac	4380
gaacaccagg	catttccagg	ggctatatatt	cactgtttgt	tgttgctttg	ttctgttata	4440
ttgttggttg	ttcatagttt	ttgttgaaag	tctagcttaa	gaagaaactt	tttttaaaaa	4500
gactgttttg	ggattctttt	tccttattat	atactgattc	tacaaaaatg	aaactacttc	4560
attttaattg	tatatatttc	aagcaccttt	gttgaagctc	aaaaaaaatg	atgcctcttt	4620

```

aaacttttagc aattatagga gtattttatgt aactatctta tgcttcaaaa aacaaaagta 4680
tttgtgtgca tgtgtatata atatatatat atacatatat atctatacac atacaattta 4740
tgttttcctg ttgaatgtat ttttatgaga ttttaaccag aacaaaggca gataaacagg 4800
cattccatag cagtgtcttt gatcacttac aaattttttg aataacacaa aatctcattc 4860
tacctgcagt ttaattggaa agatgtgtgt gtgagagtat gtatgtgtgt gtgtgtgtgt 4920
gtgtgtgagc gcgcacgcac gccttgagca gtcagcattg cacctgctat ggagaagggt 4980
attcctttat taaaatcttc ctcatgttga tttgctttca gttgggtttc aatttgctca 5040
ctggccagag acattgatgg cagttcttat ctgcatcact aatcagctcc tggatttttt 5100
tttttttttt tcaacaatg gtttgaaaca actactggaa tattgtccac aataagctgg 5160
aagtttggtg tagtatgcct caaatataac tgactgtata ctatagtggg aacttttcaa 5220
acagccctta gcacttttat actaattaac ccatttggtg attgagtttt cttttaaaaa 5280
tgcttggtgt gaaagacaca gatacccagt atgcttaacg tgaaaagaaa atgtgttctg 5340
ttttgtaaaag gaactttcaa gtattgttgt aaataacttg acagaggttg ctgaacttta 5400
aaaaaaatta atttattatt ataataacac aattttattaa tctgaagatt aaccattttt 5460
ttgtcttaga atatcaaaaa gaaaaagaaa aagggtgtct agctgtttgc atcaaaggaa 5520
aaaaagattt attatcaagg ggcaatatat ttatcttttc caaaataaat ttgttaatga 5580
tacattacaa aaatagattg acatcagcct gattagtata aattttgttg gtaattaatc 5640
cattcctggc ataaaaagtc tttatcaaaa aaaattgtag atgcttgctt tctgtttttt 5700
caatcatggc catattatga aaataactaac aggatatagg acaagggtga aattttttta 5760
ttattatttt aaagatatga tttatcctga gtgctgtatc tattactctt ttactttggg 5820
tcctgttgtg ctcttgtaaa agaaaaatat aatttcctga agaataaaat agatatatgg 5880
cacttgaggt gcacatagt tctacagttt gtttttgttt tcttcaaaaa agctgtaaga 5940
gaattatctg caacttgatt cttggcagga aataaacatt ttgagttgaa atcaaaaaaa 6000
aaaaaaaaaa a 6011

```

&lt;210&gt; 35

&lt;211&gt; 716

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 35

```

gcagtacctg gagtgtcctg caggggggaaa gcgaaccggg ccctgaagtc cgggggcagtc 60
accgggggct cctggggcgc tctgcccggg tggggctgag cagcgatcct gctttgtccc 120
agaagtccag agggatcagc ccagaaacac accctcctcc ccgggacgcc gcagctttct 180
ggaggctgag gaaggcatga agagtgggct ccacctgctg gccgactgag aaaagaattt 240
ccagaactcg gtcctatttt acagattgag aaactatggg tcaagaagag aggacggggc 300
ttgagggaat ctctgtatc tctttatatg acctcaaaact gaccatacta aacagtgtag 360
aagggtcttt taaggctcta aatgtcaggg tctcccaccc cctgatgcct gacttgtaca 420
gtcagtgtgg agtagacggg ttccctccacc cagggttgac tcaggggggat gatctgggtc 480
ccattctggg cttaagaccc caaacaaggg ttttttcagc tcaggatct ggagcctcta 540
tctgggttagt gtcgtaacct ctgtgtgcct cccgttaccc catctgtcca gtgagctcag 600
cccccatcca cctaacaggg tggccacagg gattactgag ggtaagacc ttagaactgg 660
gtctagcacc cgataagagc tcaataaatg ttgttccttt ccaatcaaaa aaaaaa 716

```

&lt;210&gt; 36

&lt;211&gt; 395

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 36

```

ccaatacttc attcttcatt ggtggagaag attgtagact tctaagcatt ttccaaataa 60
aaaagctatg atttgatttc caacttttaa acattgcatg tcttttgcca ttactacat 120
tctccaaaaa aaccttgaaa tgaagaaggc caccgtataa atacttcaga ggctgaaaaa 180
atgattatta cattggaatc ctttagccta tctgtatttt cttaaacttt gcaactttcac 240
gccaggtaaa accaaagtca gggttaaccaa tgtcatttta caaaatgtta aaaccctaata 300
tgcagttcct tttttaaatt attttaaaga ttacttaaca acattagaca gtgcaaaaaa 360
agaagcaagg aaagcatctt taattctacc atcct 395

```

<210> 37  
 <211> 134  
 <212> DNA  
 <213> Homo sapiens

<400> 37  
 ccctcgagcg gccgcccggg caggtacttt taccaccgaa ttgttcactt gactttaaga 60  
 aaccataaaa gctgcctggc tttcagcaac aggcctatca acaccatggg gagtctccat 120  
 aagggaacacc gtgt 134

<210> 38  
 <211> 644  
 <212> DNA  
 <213> Homo sapiens

<400> 38  
 aagcctgttg tcatggggga ggtggtggcg cttggtggcc actggcgggc gaggtagagg 60  
 cagtggcgct tgagttggtc gggggcagcg gcagatttga ggcttaagca acttcttccg 120  
 gggaagagtg ccagtgcagc cactgttaca attcaagatc ttgatctata tccatagatt 180  
 ggaatatttg tgggccagca atcctcagac gcctcactta ggacaaatga ggaaactgag 240  
 gcttggtgaa gttacgaaac ttgtccaaaa tcacacaact tgtaaagggc acagccaaga 300  
 ttcagagcca ggctgtaaaa attaaaatga acaaattacg gcaaagtttt aggagaaaaga 360  
 aggatgttta tgttccagag gccagtcgtc cacatcagtg gcagacagat gaagaaggcg 420  
 ttgcaccggg aaaatgtagc ttcccgggta agtaccttgg ccatgtagaa gttgatgaat 480  
 caagaggaat gcacatctgt gaagatgctg taaaagatt gaaagctgaa aggaagtctt 540  
 tcaaaggctt ctttggaaaa actggaaaga aagcagttaa agcagtttct gtgggtctaa 600  
 gcagatggac tcagagggtg tggatgaaaa actaaggacc tcat 644

<210> 39  
 <211> 657  
 <212> DNA  
 <213> Homo sapiens

<400> 39  
 ctttttgttt ggggttttcca atgtagatgt ctcagtga aa tgtgcagata tactttgttc 60  
 cttatatggt caccagtgtt aattatggac aaatacatta aaacaagggt tcctggccca 120  
 gcctcccatc taatctcttt gatactcttg gaatctaagt ctgaggagcg atttctgaat 180  
 tagccagtgt tgtaccaact ttctgttagg aattgtatta gaataacctt tctttttcag 240  
 acctgctcag tgagacatct tggggaatga agtaggaaaa tagacatttg gtggaaaaac 300  
 agcaaaatga gaacattaaa aagactcatt caagtatgag tataaagggc atggaaattc 360  
 tggctcctttg agcaaaatga gaagaaaaaa ttctgctcag cagtattcac tgtgttaaga 420  
 ttttttgttt ttacacgaa tggaaaaatg atgtgtaagt ggtatagatt ttaatcagct 480  
 aacagtcact ccagagattt tgatcagcac caattcctat agtagtaagt atttaaaagt 540  
 taagaaatac tactacattt aacattataa agtagagttc tggacataac tgaaaattag 600  
 atgtttgctt caatagaaat ttgtcccccac ttgtattttc aacaaaatta tcggaac 657

<210> 40  
 <211> 1328  
 <212> DNA  
 <213> Homo sapiens

<400> 40  
 acaatttttaa aataactagc aattaatcac agcatatcag gaaaaagtac acagtgaagt 60  
 ctggttagtt tttgtaggct cattatggtt agggctcgta agatgtatat aagaacctac 120  
 ctatcatgct gtatgtatca ctcatccat tttcatgttc catgcatact cgggcatcat 180  
 gctaatatgt atccttttaa gcactctcaa ggaaacaaaa gggcctttta tttttataaa 240  
 ggtaaaaaaa attccccaaa tattttgcac tgaatgtacc aaagggtgaag ggacattaca 300  
 atatgactaa cagcaactcc atcacttgag aagtataata gaaaatagct tctaaatcaa 360

acttccttca	cagtgccgtg	tctaccacta	caaggactgt	gcatctaagt	aataattttt	420
taagattcac	tatatgtgat	agtatgatat	gcattttatt	aaaatgcatt	agactctctt	480
ccatccatca	aatactttac	aggatggcat	ttaatacaga	tatttcgtat	ttccccact	540
gctttttatt	tgtacagcat	cattaaacac	taagctcagt	taaggagcca	tcagcaacac	600
tgaagagatc	agtagtaaga	attccatttt	ccctcatcag	tgaagacacc	acaaattgaa	660
actcagaact	atattttctaa	gcctgcattt	tcactgatgc	ataattttct	tagtaatatt	720
aagagacagt	ttttctatgg	catctccaaa	actgcatgac	atcactagtc	ttactttctg	780
ttaattttat	gagaagggtat	tcttcatttt	aattgctttt	gggattactc	cacatctttg	840
tttattttct	gactaatcag	attttcaata	gagtgaagtt	aaattggggg	tcataaaaag	900
attggattga	catatggttt	gccagcctat	gggttttacag	gcattgcccc	aacattttct	960
tgagatctat	atttataagc	agccatggaa	ttcctattat	gggatgttgg	caatcttaca	1020
ttttatagag	gtcatatgca	tagttttcat	agggtgtttt	taagaactga	ttgctctctt	1080
gtgagttaa	ctatgtttac	tactgggacc	ctcaagagga	ataccactta	tgttacactc	1140
ctgcactaaa	ggcacgtact	gcagtgtgaa	gaaatgttct	gaaaaagggt	atagaaaaat	1200
tggaaataag	aaagggaagag	ctctctgtat	tctataattg	gaagagaaaa	aaagaaaaac	1260
ttttaactgg	aaatgttagt	ttgtacttat	tgatcatgaa	tacaagtata	tatttaattt	1320
tgaaaaaa						1328

&lt;210&gt; 41

&lt;211&gt; 987

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 41

aacagagact	ggcacaggac	ctcttcattg	caggaagatg	gtagtgtagg	caggtaacat	60
tgagctcttt	tcaaaaaagg	agagctcttc	ttcaagataa	ggaagtggta	gttatggtgg	120
taacccccgg	ctatcagtc	ggatgggtgc	cacccctcct	gctgtaggat	ggaagcagcc	180
atggagtg	agggaggcgc	aataagacac	ccctccacag	agcttgccat	catgggaagc	240
tggttctacc	tcttcctggc	tcctttgttt	aaaggcctgg	ctgggagcct	tccttttggg	300
tgtctttctc	ttctccaacc	aacagaaaag	actgctcttc	aaagggtggag	ggtcttcatg	360
aaacacagct	gccaggagcc	caggcacagg	gctggggggc	tggaaaaagg	agggcacaca	420
ggaggaggga	ggagctggta	gggagatgct	ggctttacct	aagggtctcg	aacaaggagg	480
gcagaatagg	cagaggcctc	tccgtcccag	gcccattttt	gacagatggc	gggacggaaa	540
tgcaatagac	cagcctgcaa	gaaagacatg	tgttttgatg	acaggcagtg	tggccgggtg	600
gaacaagcac	aggccttgga	atccaatgga	ctgaatcaga	accctaggcc	tgccatctgt	660
cagccgggtg	acctgggtca	attttagcct	ctaaaagcct	cagtctcctt	atctgcaaaa	720
tgaggcttgt	gatacctgtt	ttgaagggtt	gctgagaaaa	ttaaagataa	gggtatccaa	780
aatagtctac	ggccatacca	ccctgaacgt	gcctaattct	gtaagctaag	cagggtcagg	840
cctggttagt	acctggatgg	ggagagtatg	gaaaacatac	ctgcccgcag	ttggagttgg	900
actctgtctt	aacagtagcg	tggcacacag	aaggcactca	gtaaataact	gttgaataaa	960
tgaagtagcg	atgttggtgtg	aaaaaaa				987

&lt;210&gt; 42

&lt;211&gt; 956

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 42

cggacgggtg	ggcggacgcg	tgggtgcagg	agcagggcgg	ctgccgactg	ccccaaccaa	60
ggaaggagcc	cctgagtc	cctgcgcctc	catccatctg	tccggccaga	gccggcatcc	120
ttgcctgtct	aaagccttaa	ctaagactcc	cgccccgggc	tggccctgtg	cagaccttac	180
tcaggggatg	tttacctggt	gctcgggaag	ggaggggaag	gggcccggga	gggggcacgg	240
caggcgtgtg	gcagccacac	gcaggcggcc	agggcggcca	gggacccaaa	gcaggatgac	300
cacgcacctc	cacgccactg	cctccccga	atgcatttgg	aaccaaaagtc	taaactgagc	360
tcgcagcccc	cgcgcctcc	ctccgcctcc	catcccgtct	agcgtcttgg	acagatggac	420
gcaggccctg	tccagcccc	agtgcgtctg	ttccggctcc	cacagactgc	cccagccaac	480
gagattgtctg	gaaaccaagt	caggccaggt	gggcccagaa	aaggggcagg	tgccgcctgg	540
ggggaacgga	tgctccgagg	actggactgt	ttttttcaca	catcgttgcc	gcagcgggtg	600

```

gaaggaaagg cagatgtaaa tgatgtgttg gtttacaggg tatatTTTTtg ataccttcaa 660
tgaattaatt cagatgtttt acgcaaggaa ggacttaccc agtattactg ctgctgtgct 720
tttgatctct gcttacCGtt caagaggcgt gtgcaggccg acagtcgggtg accccatcac 780
tcgcaggacc aagggggcgg ggactgctgg ctacgcccc gctgtgtcct cctccccctc 840
ccttccttgg gcagaatgaa ttcgatgcgt attctgtggc cgccatctgc gcagggtggt 900
gggtattctgt catttacaca cgtcgttcta attaaaaagc gaattatact ccaaaa 956

```

&lt;210&gt; 43

&lt;211&gt; 536

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 43

```

aaataaacac ttccataaca ttttgttttc gaagtctatt aatgcaatcc cacttttttc 60
cccctagttt ctaaatgtta aagagagggg aaaaaaggct caggatagtt ttcacctcac 120
agtgttagct gtcttttatt ttactcttgg aaatagagac tccattaggg ttttgacatt 180
ttgggaaccc agttttacca ttgtgtcagt aaaacaataa gatagtttga gagcatatga 240
tctaaataaa gacatttgaa ggggttagtt gaattctaaa agtaggtaat agccaaatag 300
cattctcatc ccttaacaga caaaaactta tttgtcaaaa gaattagaaa aggtgaaaat 360
atTTTTtcca gatgaaactt gtgccacttc caattgacta atgaaatata aggagacaga 420
ctggaaaaag tgggttatgc caccctttaa accctttctg gtaaatatta tggtagctaa 480
agggtggttt ccccggcacc tggacctgga caggtagggg tccgtsggta accagt 536

```

&lt;210&gt; 44

&lt;211&gt; 1630

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 44

```

gggggaggac gagtatggaa ccctgaaggt agcaagtcca ggcactggcc tgaccatccg 60
gctccctggg caccaagtcc caggcaggag cagctgtttt ccatcccttc ccagacaagc 120
tctatTTTTa tcacaatgac cttagagag gtctcccagg ccagctcaag gtgtcccact 180
atccccctctg gagggaaagag gcaggaaaat tctccccggg tccctgtcat gctactttct 240
ccatcccagt tcagactgtc caggacatct tatctgcagc cataagagaa ttataaggca 300
gtgattttccc ttagggcccag gacttgggcc tccagctcat ctgttccttc tgggcccatt 360
catggcagggt tctgggctca aagctgaact ggggagagaa gagatacaga gctaccatgt 420
gactttacct gattgccctc agtttggggg tgcttattgg gaaagagaga gacaaagagt 480
tacttgttac gggaaatatg aaaagcatgg ccaggatgca tagaggagat tctagcaggg 540
gacaggattg gctcagatga cccctgaggg ctctccagt cttgaaatgc attccatgat 600
attaggaagt cgggggtggg tgggtggtgg gggctagttg ggtttgaatt taggggccga 660
tgagcttggg tacgtgagca ggggtgttaag ttagggctg cctgtatttc tgggtccctt 720
ggaaatgtcc ccttcttcag tgtcagacct cagtcccagt gtccatatcg tgcccagaaa 780
agtagacatt atcctgcccc atcccttccc cagtgcactc tgacctagct agtgctggt 840
gcccagtgac ctgggggagc ctggctgcag gccctcactg gttccctaaa ccttgggtggc 900
tgtgattcag gtccccaggg gggactcagg gaggaatatg gctgagttct gtagtttcca 960
gagttggctg gtagagcctt ctagagggtc agaattattg cttcaggatc agctgggggt 1020
atggaattgg ctgaggatca aacgtatgta ggtgaaagga taccaggatg ttgctaaagg 1080
tgagggacag tttgggtttg ggacttacca ggggtgatgt agatctggaa cccccaagt 1140
aggctggagg gagttaaggc cagtatggaa gatagggttg ggacagggtg ctttggaatg 1200
aaagagtgac cttagagggc tccttggggc tcaggaatgc tcctgctgct gtgaagatga 1260
gaagggtgct ttactcagtt aatgatgagt gactatattt accaaaagccc ctacctgctg 1320
ctgggtccct tgtagcacag gagactgggg ctaaggggccc ctcccaggga agggacacca 1380
tcaggcctct ggctgaggca gtagcataga ggatccattt ctacctgcat ttcccaggag 1440
actagcagga ggcagccttg agaaaccgga agttcccaag ccagcgccctg gctgttctct 1500
cattgtcact gccctctccc caacctctcc tctaaccac tagagattgc ctgtgtcctg 1560
cctcttgctt cttgtagaat gcagctctgg ccctcaataa atgcttcctg cattcatctg 1620
caaaaaaaaaa 1630

```

<210> 45  
 <211> 169  
 <212> DNA  
 <213> Homo sapiens

<400> 45  
 tctttttgctt ttagctttttt atttttgtat taacaggagt cttattacac ataggtctga 60  
 taaaactggg ttatgatctt cagtctgatt ccagtgtctc ataactagat aacgtatgaa 120  
 ggaaaaacga cgacgaacaa aaaagtaagt gcttggaga cttagttga 169

<210> 46  
 <211> 769  
 <212> DNA  
 <213> Homo sapiens

<400> 46  
 tgcagggtcat atttactatc ggcaataaaaa ggaagcaaag cagtattaag cagcgggtgga 60  
 atttgtcgct ttcacttttt ataaagtgtc acataaaaatg tcatatttcc aaatttaaaa 120  
 acataactcc agttcttacc atgagaacag catggtgatc acgaaggatc ttcttgaaaa 180  
 aaacaàaaac aaaaaacaaa aacaatgatc tcttctgggt atcacatcaa atgagataca 240  
 aagggtgtact aggcaatctt agagatctgg caacttattt tataatataag gcatctgtga 300  
 ccaagagacg ttatgaatta aatgtacaaa tgtattatgt ataaatgtat taaatgcaag 360  
 cttcatataa tgacaccaat gtctctaagt tgctcagaga tcttgactgg ctgtggccct 420  
 ggccagctcc tttcctgata gtctgattct gccttcatat ataggcagct cctgatcacc 480  
 catgccagtg aatgagaaaa caagcatgga atatatataac tttaacatta aaaaatgttt 540  
 tattttgttaa taaaatcaaa tttccattg aaaccttcaa aaactttgca gaatgaggtt 600  
 ttgatataatg tgtacaagta gtaccttctt agtgcaagaa aacatcatta tttctgtctg 660  
 cctgcctttt tgttttttaa aatgaagact atcattgaaa caagtttgtc ttcagtatca 720  
 ggacatgttg acggagagga aaggtaggaa aggggttaggg atagaagcc 769

<210> 47  
 <211> 2529  
 <212> DNA  
 <213> Homo sapiens

<400> 47  
 tttagttcat agtaatgtaa aaccatttgt ttaattctaa atcaaatacac tttcacaaca 60  
 gtgaaaatta gtgactgggt aagggtgtgcc actgtacata tcatcatttt ctgactgggg 120  
 tcaggacctg gtcctagtc acaagggtgg caggaggagg gtggaggcta agaacacaga 180  
 aaacacacaa aagaaaggaa agctgccttg gcagaaggat gaggtggtga gcttgccgag 240  
 ggatggtggg aaggggggtc cctgttgggg ccgagccagg agtcccaagt cagctctcct 300  
 gccttactta gtcctggca gaggtgagt ggggacctac gaggttcaaa atcaaatggc 360  
 atttggccag cctggcttta ctaacagggt cccagagtgc ctctgttggc tgagctctcc 420  
 tgggtcact ccatttcatt gaagagtcca aatgattcat tttcctacc acaacttttc 480  
 attattcttc tggaaacca tttctgttga gtccatctga cttaagtcct ctctccctcc 540  
 actagttggg gccactgcac tgaggggggt cccaccaatt ctctctagag aagagacact 600  
 ccagaggccc ctgcaacttt gcggatttcc agaagggtgat aaaaagagca ctcttgagtg 660  
 ggtgcccagg aatgttttaa atctatcagg cacactataa agctggtggt ttcttcttac 720  
 caagtggatt cggcatatga accacctact caatacttta tattttgtct gtttaaacac 780  
 tgaactctgg tgttgacagg taaaaaggag aagagatggg gactgtgaag aggggagggc 840  
 ttccctcatc ttcctcaaga tctttgtttc cataaactat gcagtcataa ttgagaaaaa 900  
 gcaatagatg gggcttctta ccatttgttg gttattgtct ggggttagcca ggagcagtgt 960  
 ggatggcaaa gtaggagaga ggcccagagg aaagcccatc tccctccagc tttgggggtct 1020  
 ccagaaagag gctggatttc tgggatgaag cctgaaggc agagcaagaa ctgttccacc 1080  
 aggtgaacag tcctacctgc ttggtaccat agtccctcaa taagattcag aggaagaagc 1140  
 ttatgaaact gaaaatcaaa tcaaggatatt gggaagaata atttccctc gattccacag 1200  
 gaggggaagc cacacaatat cattgtgctg gggctcccca aggcctgcc acctggcttt 1260  
 acaaatcatc aggggttgcc tgcttggcag tcacatgctt ccctgggttt agcacacata 1320

caaggagttt	tcagggaaact	ctatcaagcc	ataccaaaat	cagggtcaca	tgtggggttc	1380
ccctttcctt	gcctcttcat	aaaagacaac	ttggcttctg	aggatgggtg	tcttttgcac	1440
gcagttgggc	tgacctgaca	aagcccccag	tttctgtgtg	caggttcttg	gagaggatgc	1500
attcaagctt	ctgcagccta	ggggacaggg	ctgcttgttc	agttattact	gcctcggagc	1560
tccaaatccc	accaaagtcc	tgactccagg	tctttcctaa	tgacacagtag	tcagtctcag	1620
cttcggcagt	attctcggct	gtatgtttct	tggcagagag	aggcagatga	acatagtttt	1680
agggagaaa	ctgatgggaa	acctgtgagt	taagccacat	gtctcaccag	gaataattta	1740
tgccaggaaa	ccaggaagtc	attcaagttg	ttctctgagg	ccaaagacac	tgagcacagc	1800
ccagagccaa	taaaagatct	ttgagtctct	ggtgaattca	cgaagtgacc	ccagcttttag	1860
ctactgcaat	tatgattttt	atgggacagc	aatttcttgc	atctctacag	aggaagaaga	1920
gggggagtgg	gaggggaagg	aaagagaaca	gagcggcact	gggatttgaa	aggggaacct	1980
ctctatctga	ggagccccc	ctggcttcag	aagcaactta	ccaaggggta	tttaaagaca	2040
tgaaaatttc	cagaaatacc	atttggtgca	tccctttgtt	tctgtaatat	taaactcagg	2100
tgaaattata	ctctgacagt	ttctctcttt	ctgcctcttc	cctctgcaga	gtcaggacct	2160
gcagaactgg	ctgaaacaag	atttcatggg	gtcaccatg	agagatgact	caatgccaa	2220
gcctgaagtt	atagagtgtt	tacagcgggt	gcatatttca	ggggtcatcg	ccaactgggt	2280
tcgagtcca	aagctctgat	gaagaaacaa	gactccttga	tgtgttactg	atcccactga	2340
ttccaggagt	caagattagc	caggaagcca	aacaccagga	gttgggggtg	cagctcacca	2400
gtccagagcc	ctgccacgga	tgtacgcagg	agcccagcat	taggcaatca	ggagccagaa	2460
catgatcacc	agggccacaa	ataggaagag	gcgtgacagg	aactgctcgt	ccacatacct	2520
gggggtgtcc						2529

&lt;210&gt; 48

&lt;211&gt; 1552

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 48

tttttttttt	tttttgattt	ctgggacaat	taagctttat	ttttcatata	tatatatatt	60
ttcatatata	tatatacata	catatatataa	ggaaacaatt	tgcaaattta	cacacctgac	120
aaaaccatat	atacacacat	atgtatgcat	acacacagac	agacacacac	acccgaagct	180
ctagccaggc	ccgttttcca	tccctaagta	ccattctctc	atttgggccc	ttctagggtt	240
ggggccctga	gcttggtttg	tagaagtttg	gtgctaatat	aaccatagct	ttaatcccca	300
tgaaagctac	tgtagacctc	atctttgtct	gtccccgct	gcctttcagt	ttacgtgat	360
ccatcaagag	ggctatggga	gccaaagtga	cacgggggat	tgaggctaata	tcacctgaac	420
tcgaaaacag	cgcccagctt	cctcaccgca	ggcagcgctc	ttttcttttt	ttttcctcga	480
gacggagtct	cgctgtgttg	cccaggctgg	agtgcagtgg	cacggctctg	gctcactgca	540
agctccacct	cctggattca	taccattctc	ctgcttcagc	cttccgagta	gctgggacta	600
taggtgccaa	ccactacgcc	tagctaattt	ttttttgtat	tttttagtaga	gacagggttt	660
caccgtgtta	gccaggatgg	tctcgtcctg	actttgtgat	ccgcccgcct	cggcctccca	720
aagtgtctgg	attacaggcg	tgagccacca	cacctggccc	cggcacgtat	cttttaagga	780
atgacaccag	ttcctggctt	ctgaccaaag	aaaaaatgtc	acaggagact	ttgaagaggc	840
agacaggagg	gtggtggcag	caacactgca	gctgcttctg	gatgctgctg	gggtgctctc	900
cggagcgggt	gtgaacagcg	cacttcaaca	tgagcaggcg	cctggctccg	gtgtgtcctc	960
acttcagtgg	tgacactgga	tgggtggaagc	cagcctttgg	ggcaggaaac	cagctcagag	1020
aggctaccca	gctcagctgc	tggcaggagc	caggtattta	cagccataat	gtgtgtaaag	1080
aaaaaacacg	ttctgcaaga	aactctccta	cccgtctggg	agactggggc	tccttgcttg	1140
ggatgagctt	cactcaacgt	ggagatgggt	gtggactggg	ccctgaaaag	cgggccttgc	1200
agggccaagt	gaggtcctca	ggtcctaacc	cagtggccct	ctgaaagggg	gtgtgcaggc	1260
gaggggagca	ggaggcttct	ctctagtcct	tttggaggct	ttggctgaga	gaagagttag	1320
cagggagctg	ggaatggtcc	aggcagggaa	gggagctgaa	gtgattcggg	gctaattgct	1380
cagatcgatg	tatttctctc	cctggctctc	cggagccctc	ttgtcaccgc	tgctgcccct	1440
caggaggccc	atctcttctg	ggagcttatc	tgacttaact	tcaactacaa	gttcgctctt	1500
acgagaccgg	gggtagcgtg	atctcctgct	tccctgagcg	cctgcacggc	ag	1552

&lt;210&gt; 49

&lt;211&gt; 921



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 49

```

ctgtggtccc agctactcag gaggtctgagg cgggaggatt gcttgagccc aggagttgga 60
tggtgcagtg agccaagatc gcaccattgc cctccactct gggccacgga gcaataccct 120
gtctcagaaa acaaaacaaca aaaagcagaa acgctgaagg ggtcggttta cgggaaaacc 180
gcctgtcaga acacttggtt actcctaccc cagatcagtg gacctgggaa tgaggggttg 240
tccccggagg cttttctcca agctgttgcc accagacccg ccatgggaac cctggccaca 300
gaagcctccc ggggagtgag ccagagcctg gaccgctgtg ctgatgtgtc tgggggtggag 360
ggaggggtggg gagtggtgcaa ggggtgtgtgt gtgcccgggg ggtgttcatg ggcaagcatg 420
tgcggtgcctg tgtgtgtgctg tgcccctccc ctgcagccgt cgggtggtatc tccctccagc 480
cccttcgcca ctttctgagc attgtctgtc cacgtgagac tgcccagaga cagcagagct 540
ccacgtgggt ttaaggggag acctttccct ggacctgggg gtctcgccgt atctcatgac 600
caggtgctaa atgaccgac atgcatcacc tgcctttcga tgaccaacct ccctgtcccc 660
gtcccgtcga cctgcccccg tggcgtctca cggtgatgcc tgctcctgac attgggtgtt 720
actgtagcaa actacattct ggatgggaat ttcatgtac atgtgtggca tgtggaaaat 780
ttcaataaaa atggacttga tttagaaagc caaaaagctg tgtggtcctt ccaacacgga 840
tactttgacc tcttgcttac aacccttccc ttgggtccga ggctggtagc tttgttcact 900
tcagatgggt gggggcgggg g 921

```

&lt;210&gt; 50

&lt;211&gt; 338

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 50

```

atgatctatc tagatgcctt accgtaaaat caaaacacaa aaccctactg actcattccc 60
tcccttccag atattacccc atttctctac ttccatttgt agccaaactt tccaaaaatt 120
catgttctgt cttcatttcc tcatgttcaa cccaccctgt cttagctacc acccctcagt 180
aacgacctag cctgggtaga aacaaatgtc agcatgatac cataactcaat gatccttcgt 240
cactgttgtc attgtcatca ttccatggcc ttactttccc tctcagcgcc atttgctaca 300
gtaagaaact ttctttcttg aattcttggg tctcttgg 338

```

&lt;210&gt; 51

&lt;211&gt; 1191

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 51

```

ctagcaagca ggtaaacgag ctttgtacaa acacacacag accaacacat cgggggatgg 60
ctgtgtgttg ctagagcaga ggctgattaa acactcagtg tgttggctct ctgtgccact 120
cctggaaaat aatgaattgg gtaaggaaca gtaataaga aaatgtgctt tgctaactgt 180
gcacattaca acaaagagct ggcagctcct gaaggaaaag ggcttgtgct gctgcccgtt 240
aaacttgtca gtcaactcat gccagcagcc tcagcgtctg cctccccagc acacctcat 300
tacatgtgtc tgtctggcct gatctgtgca tctgctcgga gacgctcctg acaagtccgg 360
aatttctcta tttctccact ggtgcaaaga gcggatttct cctgtcttct cttctgtcac 420
ccccgtcctt ctcccccagg aggtcctctg atttatggta gctttggact tgcttccccg 480
tctgactgtc cttgacttct agaatggaag aagctgagct ggtgaaggga agactccagg 540
ccatcacaga taaaagaaaa atacaggaag aaatctcaca gaagcgtctg aaaatagagg 600
aagacaaact aaagcaccag catttgaaga aaaaggcctt gagggagaaa tggcttctag 660
atggaatcag cagcggaaaa gaacaggaag agatgaagaa gcaaaatcaa caagaccagc 720
accagatcca ggttctagaa caaagtatcc tcaggcttga gaaagagatc caagatcttg 780
aaaaagctga actgcaaatc tcaacgaagg aagaggccat tttaaagaaa ctaaagtcaa 840
ttgagcggac aacagaagac attataagat ctgtgaaagt ggaaagagaa gaaagagcag 900
aagagtcaat tgaggacatc tatgtctaata tcctgacct tccaaagtcc tacatacctt 960
ctaggttaag gaaggagata aatgaagaaa aagaagatga tgaacaaaat aggaaagctt 1020
tatatgccat ggaaattaaa gttgaaaaag acttgaagac tggagaaagt acagttctgt 1080

```

cttccaatac ctctggccat cagatgactt taaaagggtac aggagtaaaa gtttaagatg 1140  
atgggcaaaa gtccagtgtg ttcagtaaag tgctaatacac aagttggagg t 1191

<210> 52

<211> 1200

<212> DNA

<213> Homo sapiens

<400> 52

aacaggggact ctcaactctat caacccccagg ctggagtcog gtgcgcccac cctgggtccc 60  
tgcaacctcc gctcccagg ctcaagcaac tctcctgcct cagtcgctct agtagctggg 120  
actacaggca cacaccacca tgcccagcca atttttgcat tttttgtaga gacagggttt 180  
cgcttctgt ccaggccggc atcatatact ttaaatacatg cccagatgac tttataacct 240  
aatacaatat atcaggttgg tttaaaaata attgcttttt tattattttt gcatttttgc 300  
accaacctta atgctatgta aatagttgtt atactgttgc ttaacaacag tatgacaatt 360  
ttggcttttt ctttgtatta ttttgtattt ttttttttta ttgtgtggtc tttttttttt 420  
ttctcagtgt tttcaattcc tcttgggttg aatccatgga tgcaaaaccc acagatatga 480  
agggtctggc atatatgcat tgatgattgt cctattatat tagttataaa gtgtcattta 540  
atatgtagtg aaagtattgg tacagtggaa agagttagttg aaacataaaa catttggacc 600  
tttcaagaaa ggtagcttgg tgaagttttt cacttccaaa ctatgtccca gtcagggtctc 660  
tgctactaat tagctataat ctttgcacaa attacatcac ctttgagtct cagttgcctc 720  
acctgtaaaa tgaaagaact ggatactctc taaggctact tccagccctg tcattctata 780  
actctgttat gctgaggaag aaattcacat tgtgttaact gtatgagtca aactgaaaat 840  
gattattaaa gtgggaaaaa gccaatgtct tctcttagaa agctcaacta aatttgagaa 900  
gaataatctt ttcaattttt taagaatttta aatattttta agggtttgac ctatttattt 960  
agagatgggg tctcactctg tcacccagac tggagtacag tggcacaatc atagctcact 1020  
gctgcctcaa attcatgggc tcaagtgate ctctgcctc tgccctccaga gtagctgcga 1080  
ctatgggcat gtgccaccac gcctggctaa catttgtatt gacctattta tttattgtga 1140  
tttataatctt tttttttttt tctttttttt tttttttaca aatcagaaat acttattttg 1200

<210> 53

<211> 989

<212> DNA

<213> Homo sapiens

<400> 53

aagccaccac tcaaaacttc ctatacatth tcacagcaga gacaagtga ctttattttt 60  
tatgcctttt ttcttatgtg tttttcaagt ctttttcaaa acaaggcccc aggactctcc 120  
gattcaatta gtccttgggc tggtcgactg tgcaggagtc caggagcct ctacaaatgc 180  
agagtgactc tttaccaaca taaaccctag atacatgcaa aaagcaggac ctttctctca 240  
ggaatgtgcc atttcagatg cacagcacc atgcagaaaa gctggaattt tcttggaaac 300  
cgactgtgat agaggtgctt acatgaacat tgctactgtc tttctttttt tttgagacag 360  
gtttcgcttg tgcccaggct gagtgcattg cgtgatctca ctactgcaa ttccacctcc 420  
aggttcaagc attctcctgc tcagcctcct agtagctggg ttacaggcac tgccaccatg 480  
coggctaatt ttgtattttt gtagagatgg atttctccat ttggtcaggc ggtctcgaac 540  
cccaacctca gtgatctgcc acctcagcct cctaagtgtt ggattacagg atgagccacc 600  
cgaccggcca ctactgtctt tctttgacct ttccagtttc gaagataaag aggaaataat 660  
ttctctgaag tacttgataa aatttccaaa caaacacat gtccacttca ctgataaaaa 720  
atttaccgca gtttggcacc taagagtatg acaacagcaa taaaagtaa tttcaaagag 780  
ttaagatttc ttcagcaaaa tagatgattc acatcttcaa gtcctttttg aaatcagtta 840  
ttaatattat tctttcctca tttccatctg aatgactgca gcaatagttt tttttttttt 900  
tttttttttt ttgcgagatg gaatctcgct ctgtcgccca gcgggagtg actggcgcaa 960  
gcccggctca ccgcaatctc tgccacccg

<210> 54

<211> 250

<212> DNA

<213> Homo sapiens

&lt;400&gt; 54

```

catttcccca ttggtcctga tgttgaagat ttagttaaag aggctgtaag tcaggttcga 60
gcagaggcta ctacaagaag tagggaatca agtccctcac atgggctatt aaaactaggt 120
agtgggtggag tagtgaaaaa gaaatctgag caacttcata acgtaactgc ctttcagggg 180
aaagggcatt ctttaggaac tgcattctggt aaccacacc ttgatccaag agctagggaa 240
acttcagttg                                     250

```

&lt;210&gt; 55

&lt;211&gt; 2270

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 55

```

gcgccccga gcagcgcccg cgccctcccg gccttctccg ccgggacctc gagcgaaaga 60
ggcccgcgcg ccgcccagcc ctccgctccc tgcccaccgg gcacaccgcg ccgccacccc 120
gaccccgctg cgacaggcct gtccgctgca caccagcttg ttggcgctct cgtcgccgcg 180
ctcgccccgg gctactcctg cgcgccacaa tgagctcccg catcgccagg gcgctcgcc 240
tagtcgtcac ctttctccac ttgaccaggc tggcgctctc cactgcccc gctgctgcc 300
actgccccct ggaggcgccc aagtgcgctc cgggagtcgg gctggtcggg gacggctgcg 360
gctgctgtaa ggtctgcgcc aagcagctca acgaggactg cagcaaacg cagccctgcg 420
accacaccaa ggggctggaa tgcaacttcg gcgccaagtc caccgctctg aaggggatct 480
gcagagctca gtcagagggc agaccctgtg aatataactc cagaatctac caaacgggg 540
aaagtttcca gcccaactgt aaacatcagt gcacatgtat tgatggcgcc gtgggctgca 600
ttcctctgtg tccccaaaga ctatctctcc ccaacttggg ctgtcccaac cctcggtg 660
tcaaagttac cgggcagtg tgcgaggagt gggctctgtg cgaggatagt atcaaggacc 720
ccatggagga ccaggacggc ctcttggca aggagctggg attcgatgcc tccgaggtg 780
agttgacgag aaacaatgaa ttgattgcag ttggaaaagg cagctcactg aagcggtcc 840
ctgttttttg aatggagcct cgcatcctat acaacccttt acaaggccag aaatgtattg 900
ttcaaacaac ttcattggtc cagtgtctaa agacctgtgg aactgggtatc tccacacgag 960
ttaccaatga caaccctgag tgccgccttg tgaaagaaac ccggatttgt gaggtgcggc 1020
cttgtggaca gccagtgtac agcagcctga aaaagggcaa gaaatgcagc aagaccaaga 1080
aatccccga accagtcagg tttacttacg ctggatgttt gagtgtgaag aaataccggc 1140
ccaagtactg cggttctctg gtggacggcg gatgctgcac gcccagctg accaggactg 1200
tgaagatgag gttccgctgc gaagatgggg agacattttc caagaacgct atgatgatcc 1260
agtcttgcga atgcaactac aactgccccg atgccaatga agcagcgttt cccttctaca 1320
ggctgttcaa tgacattcac aaatttaggg actaaatgct acctgggttt ccagggcaca 1380
cctagaacaa caagggagaa gagtgtcaga atcagaatca tggagaaaat gggcggggg 1440
gggtgtgggtg atgggactca ttgtagaaag gaagccttgc tcattcttga ggagcattaa 1500
ggtattttcg aactgccaa ggtgctggtg cggatggaca ctaatgcagc cacgattgga 1560
gaatactttg cttcatagta ttggagcaca tgttactgct tcattttgga gcttgtggag 1620
ttgatgactt tctgttttct gtttgtaaat tatttgctaa gcatattttc tctaggcttt 1680
tttctttttg gggttctaca gtcgtaaaag agataataag attagttgga cagtttaaag 1740
cttttattcg tcttttgaca aaagtaaag ggagggcatt ccattccctc ctgaaggggg 1800
acactccatg agtgtctgtg agaggcagct atctgcactc taaactgcaa acagaaatca 1860
gggtgtttta gactgaatgt tttatttatc aaaatgtagc ttttggggag ggaggggaaa 1920
tgtaatactg gaataatttg taaatgattt taattttata ttcagtgaag agattttatt 1980
tatggaatta accatttaat aaagaaatat ttacctaata tctgagtgtg tgccattcgg 2040
tattttttaga ggtgctccaa agtcattagg aacaacctag ctcacgtact caattattca 2100
aacaggactt attgggatac agcagtgaat taagctatta aaataagata atgattgctt 2160
ttataccttc agtagagaaa agtcttttgc tataaagtaa tgtttaaaaa acatgtattg 2220
aacacgacat tgtatgaagc acaataaaga ttctgaagct aaaaaaaaaa 2270

```

&lt;210&gt; 56

&lt;211&gt; 1636

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 56

cttgaatgaa	gctgacacca	agaaccgcgg	gaagagcttg	ggcccaaagc	aggaaagggg	60
agcgctcgag	ttggaaaagg	accgctgctg	ctggccgaac	tcaagcccgg	gcgccccac	120
cagtttgatt	ggaagtccag	ctgtgaaacc	tggagcgctg	ccttctcccc	agatgggtcc	180
tggtttgctt	gggtctcaagg	acactgcac	gtcaaaactga	tccccctggc	gttggaggag	240
cagttcatcc	ctaaagggtt	tgaagccaaa	agccgaagta	gcaaaaatga	gacgaaaggg	300
cggggcagcc	caaaagagaa	gacgctggac	tgtggtcaga	ttgtctgggg	gctggccttc	360
agcccgtggc	cttccccacc	cagcaggaag	ctctgggcac	gccaccacc	ccaagtgtcc	420
gatgtctctt	gcctgggtct	tgctacggga	ctcaacgatg	ggcagatcaa	gatctgggag	480
gtgcagacag	ggctcctgct	tttgaatctt	tccggccacc	aagatgtcgt	gagagatctg	540
agcttcacac	ccagtggcag	tttgattttg	gtctccgcgt	cacgggataa	gactcttcgc	600
atctgggacc	tgaataaaca	cggtaaacag	attcaagtgt	tatcgggcca	cctgcagtgg	660
gtttactgct	gttccatctc	cccagactgc	agcatgctgt	gctctgcagc	tggagagaag	720
tcgggtcttt	tatggagcat	gaggtccctac	acgttaattc	ggaagctaga	gggccatcaa	780
agcagtggtg	tctcttggtg	cttctcccc	gactctgccc	tgcttgtcac	ggcttcttac	840
gataccaatg	tgattatgtg	ggacccctac	accggcgaaa	ggctgagggtc	actccaccac	900
accaggttg	accccgccat	ggatgacagt	gacgtccaca	ttagctcact	gagatctgtg	960
tgcttctctc	cagaaggctt	gtaccttgcc	acggtggcag	atgacagact	cctcaggatc	1020
tgggcoctgg	aactgaaaac	tcccattgca	tttgctccta	tgaccaatgg	gctttgctgc	1080
acattttttc	cacatggtgg	agtcattgcc	acagggacaa	gagatggcca	cgtccagtcc	1140
tggacagctc	ctagggtcct	gtcctcactg	aagcacttat	gccggaaaagc	ccttcgaagt	1200
ttcctaacaa	cttaccaagt	cctagcactg	ccaatcccc	agaaaatgaa	agagttcctc	1260
acatacagga	ctttttaagc	aacaccacat	cttgtgtctc	tttgtagcag	ggtaaatcgt	1320
cctgtcaaa	ggagtgtgctg	gaataatggg	ccaaacatct	ggtcttgcat	tgaatatgca	1380
tttctttggg	attgtgaata	gaatgtagca	aaaccagatt	ccagtgtaca	taaaagaatt	1440
tttttgtctt	taaatagata	caaatgtcta	tcaacttta	tcaagttgta	acttatattg	1500
aagacaattt	gatacataat	aaaaaattat	gacaatgtcc	tgggaaaaaa	aaaatgtaga	1560
aagatggtga	agggtgggat	ggatgaggag	cgtggtgacg	ggggcctgca	gcgggttggg	1620
gaccctgtgc	tgcgtt					1636

&lt;210&gt; 57

&lt;211&gt; 460

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 57

ccatgtgtgt	atgagagaga	gagagattgg	gagggagagg	gagctcacta	gcgcatatgt	60
gcctccaggg	ggctgcagat	gtgtctgagg	gtgagcctgg	tgaaagagaa	gacaaaagaa	120
tggaatgagc	taaagcagcc	gcctgggggtg	ggaggccgag	cccattttgt	tgcagcaggg	180
ggcaggagcc	cagcaaggga	gcctccattc	ccaggactct	ggagggagct	gagaccatcc	240
atgcccgcag	agccctccct	cacactccat	cctgtccagc	cctaattgtg	caggtgggga	300
aactgaggct	gggaagtcac	atagcaagtg	actggcagag	ctgggactgg	aaccacaacca	360
gcctcctaga	ccacggttct	tcccatcaat	ggaatgctag	agactccagc	caggtgggta	420
ccgagctcga	attcgtaatc	atgggtcatag	ctgtttcctg			460

&lt;210&gt; 58

&lt;211&gt; 1049

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 58

atctgatcaa	gaatacctgc	cctgggtcact	ctgaggatgt	ttctgtccac	ttgttcacat	60
tgaggaccaa	gatatccttt	tttacagagg	cacttggtcg	gtctaacaca	gacacctcca	120
tgacgacatg	ctgggtcaca	ttttgcagtt	ctgcagaagt	ccccctccca	gcctggacta	180
cagcagcact	ttcccgtggg	ggtgcagtag	ccgtttcgac	agagcctgga	gcactctgaa	240
gtcagtgctt	gtgcagggtt	taccgtggct	ctgcattcct	caggcattaa	aggtcttttg	300
ggatctacaa	ttttgtagag	ttttccattg	tgagtctggg	tcatactttt	actgcttgat	360
aaaatgtaaa	cttcacctag	ttcatcttct	ccaaatccca	agatgtgacc	ggaaaagtag	420

```

cctctacagg acccactagt gccgacacag agtgggttttt cttgccactg ctttgtcaca 480
ggacttttgc ggagagttag gaaattccca ttacgatctc caaacacgta gtttccatac 540
aatcttttctg actggcagcc ccggtatata aatccacca ccaaaggacc attactgaat 600
ggcttgaatt ctaaaaagtga tggctcactt tcataatctt tcccctttat tatctgtaga 660
attctggctg atgatctgtt ttttccattg gagtctgaac acagtatcgt taaattgatg 720
tttatatcag tgggatgtct atccacagca catctgcctg gatcgtggag cccatgagca 780
aacacttcgg ggggctggtt ggtgctgttg aagtgtgggt tgctccttgg tatggaataa 840
ggcacgttgc acatgtctgt gtccacatcc agccgtagca ctgagcctgt gaaatcactt 900
aaccatcca tttcttccat atcatccagt gtaatcatcc catcaccaag aatgatgtac 960
aaaaacccgt cagggccaaa gagcagttgc cctcccagat gctttctgtg gagttctgca 1020
acttcaagaa agactctggc tgttctcaa 1049

```

<210> 59  
 <211> 747  
 <212> DNA  
 <213> Homo sapiens

```

<400> 59
tttttcaa at cacatatggc ttctttgacc ccatcaaata actttattca cacaaacgtc 60
ccttaattta caaagcctca gtcattcata cacattaggg gatccacagt gttcaaggaa 120
cttaaatata atgtatcata ccaacccaag taaaccaagt acaaaaaata ttcataataa 180
gttggttcaca cgtaggctct agattaccag ctctctgtgca aaaaaaggaa atgaagaaaa 240
atagatttat taactagtat tggaaactaa ctttgtgcct ggcttaaaac ctccctcacg 300
ctcgtctgtc ccacacaaat gtttaagaag tcactgcaat gtactccccg gctctgatga 360
aaagaagccc ctggcacaaa agattccagt gcccctgaag aggctccctt cctcctgtgg 420
gctctcctag aaaaccagcg ggacggcctc cctgctgata ccgtctataa ccttaggggg 480
ccctcgggca ggcaacggca gtggactcat ctcggtgatg gctgtagatg ctaacactgg 540
ccaattcaat gccacaccta ctggttacc tttgagggca tttctccaga cagaagcccc 600
ttgaagccta ggtagggcag gatcagagat acaccctgtt ttgtctcgaa gggctccaca 660
gccagtagc acatgcttgc agaagtagta tctctggact tctgcctcca gtcgaccggc 720
cgcgaaatata gtagtaatat cggccgc 747

```

<210> 60  
 <211> 1036  
 <212> PRT  
 <213> Homo sapiens

```

<400> 60
Met Tyr Leu Val Ala Gly Asp Arg Gly Leu Ala Gly Cys Gly His Leu
  1           5           10          15
Leu Val Ser Leu Leu Gly Leu Leu Leu Leu Pro Ala Arg Ser Gly Thr
          20          25          30
Arg Ala Leu Val Cys Leu Pro Cys Asp Glu Ser Lys Cys Glu Glu Pro
          35          40          45
Arg Asn Arg Pro Gly Ser Ile Val Gln Gly Val Cys Gly Cys Cys Tyr
          50          55          60
Thr Cys Ala Ser Gln Gly Asn Glu Ser Cys Gly Gly Thr Phe Gly Ile
          65          70          75          80
Tyr Gly Thr Cys Asp Arg Gly Leu Arg Cys Val Ile Arg Pro Pro Leu
          85          90          95

```

Asn Gly Asp Ser Leu Thr Glu Tyr Glu Ala Gly Val Cys Glu Asp Glu	100	105	110
Asn Trp Thr Asp Asp Gln Leu Leu Gly Phe Lys Pro Cys Asn Glu Asn	115	120	125
Leu Ile Ala Gly Cys Asn Ile Ile Asn Gly Lys Cys Glu Cys Asn Thr	130	135	140
Ile Arg Thr Cys Ser Asn Pro Phe Glu Phe Pro Ser Gln Asp Met Cys	145	150	155
Leu Ser Ala Leu Lys Arg Ile Glu Glu Glu Lys Pro Asp Cys Ser Lys	165	170	175
Ala Arg Cys Glu Val Gln Phe Ser Pro Arg Cys Pro Glu Asp Ser Val	180	185	190
Leu Ile Glu Gly Tyr Ala Pro Pro Gly Glu Cys Cys Pro Leu Pro Ser	195	200	205
Arg Cys Val Cys Asn Pro Ala Gly Cys Leu Arg Lys Val Cys Gln Pro	210	215	220
Gly Asn Leu Asn Ile Leu Val Ser Lys Ala Ser Gly Lys Pro Gly Glu	225	230	235
Cys Cys Asp Leu Tyr Glu Cys Lys Pro Val Phe Gly Val Asp Cys Arg	245	250	255
Thr Val Glu Cys Pro Thr Val Gln Gln Thr Ala Cys Pro Pro Asp Ser	260	265	270
Tyr Glu Thr Gln Val Arg Leu Thr Ala Asp Gly Cys Cys Thr Leu Pro	275	280	285
Thr Arg Cys Glu Cys Leu Ser Gly Leu Cys Gly Phe Pro Val Cys Glu	290	295	300
Val Gly Ser Thr Pro Arg Ile Val Ser Arg Gly Asp Gly Thr Pro Gly	305	310	315
Lys Cys Cys Asp Val Phe Glu Cys Val Asn Asp Thr Lys Pro Ala Cys	325	330	335
Val Phe Asn Asn Val Glu Tyr Tyr Asp Gly Asp Met Phe Arg Met Asp	340	345	350
Asn Cys Arg Phe Cys Arg Cys Gln Gly Gly Val Ala Ile Cys Phe Thr	355	360	365
Ala Gln Cys Gly Glu Ile Asn Cys Glu Arg Tyr Tyr Val Pro Glu Gly	370	375	380
Glu Cys Cys Pro Val Cys Glu Asp Pro Val Tyr Pro Phe Asn Asn Pro	385	390	395
			400

Ala Gly Cys Tyr Ala Asn Gly Leu Ile Leu Ala His Gly Asp Arg Trp  
405 410 415

Arg Glu Asp Asp Cys Thr Phe Cys Gln Cys Val Asn Gly Glu Arg His  
420 425 430

Cys Val Ala Thr Val Cys Gly Gln Thr Cys Thr Asn Pro Val Lys Val  
435 440 445

Pro Gly Glu Cys Cys Pro Val Cys Glu Glu Pro Thr Ile Ile Thr Val  
450 455 460

Asp Pro Pro Ala Cys Gly Glu Leu Ser Asn Cys Thr Leu Thr Arg Lys  
465 470 475 480

Asp Cys Ile Asn Gly Phe Lys Arg Asp His Asn Gly Cys Arg Thr Cys  
485 490 495

Gln Cys Ile Asn Thr Gln Glu Leu Cys Ser Glu Arg Lys Gln Gly Cys  
500 505 510

Thr Leu Asn Cys Pro Phe Gly Phe Leu Thr Asp Ala Gln Asn Cys Glu  
515 520 525

Ile Cys Glu Cys Arg Pro Arg Pro Lys Lys Cys Arg Pro Ile Ile Cys  
530 535 540

Asp Lys Tyr Cys Pro Leu Gly Leu Leu Lys Asn Lys His Gly Cys Asp  
545 550 555 560

Ile Cys Arg Cys Lys Lys Cys Pro Glu Leu Ser Cys Ser Lys Ile Cys  
565 570 575

Pro Leu Gly Phe Gln Gln Asp Ser His Gly Cys Leu Ile Cys Lys Cys  
580 585 590

Arg Glu Ala Ser Ala Ser Ala Gly Pro Pro Ile Leu Ser Gly Thr Cys  
595 600 605

Leu Thr Val Asp Gly His His His Lys Asn Glu Glu Ser Trp His Asp  
610 615 620

Gly Cys Arg Glu Cys Tyr Cys Leu Asn Gly Arg Glu Met Cys Ala Leu  
625 630 635 640

Ile Thr Cys Pro Val Pro Ala Cys Gly Asn Pro Thr Ile His Pro Gly  
645 650 655

Gln Cys Cys Pro Ser Cys Ala Asp Asp Phe Val Val Gln Lys Pro Glu  
660 665 670

Leu Ser Thr Pro Ser Ile Cys His Ala Pro Gly Gly Glu Tyr Phe Val  
675 680 685

Glu Gly Glu Thr Trp Asn Ile Asp Ser Cys Thr Gln Cys Thr Cys His  
690 695 700

Ser Gly Arg Val Leu Cys Glu Thr Glu Val Cys Pro Pro Leu Leu Cys  
 705 710 715 720  
 Gln Asn Pro Ser Arg Thr Gln Asp Ser Cys Cys Pro Gln Cys Thr Asp  
 725 730 735  
 Gln Pro Phe Arg Pro Ser Leu Ser Arg Asn Asn Ser Val Pro Asn Tyr  
 740 745 750  
 Cys Lys Asn Asp Glu Gly Asp Ile Phe Leu Ala Ala Glu Ser Trp Lys  
 755 760 765  
 Pro Asp Val Cys Thr Ser Cys Ile Cys Ile Asp Ser Val Ile Ser Cys  
 770 775 780  
 Phe Ser Glu Ser Cys Pro Ser Val Ser Cys Glu Arg Pro Val Leu Arg  
 785 790 795 800  
 Lys Gly Gln Cys Cys Pro Tyr Cys Ile Lys Asp Thr Ile Pro Lys Lys  
 805 810 815  
 Val Val Cys His Phe Ser Gly Lys Ala Tyr Ala Asp Glu Glu Arg Trp  
 820 825 830  
 Asp Leu Asp Ser Cys Thr His Cys Tyr Cys Leu Gln Gly Gln Thr Leu  
 835 840 845  
 Cys Ser Thr Val Ser Cys Pro Pro Leu Pro Cys Val Glu Pro Ile Asn  
 850 855 860  
 Val Glu Gly Ser Cys Cys Pro Met Cys Pro Glu Met Tyr Val Pro Glu  
 865 870 875 880  
 Pro Thr Asn Ile Pro Ile Glu Lys Thr Asn His Arg Gly Glu Val Asp  
 885 890 895  
 Leu Glu Val Pro Leu Trp Pro Thr Pro Ser Glu Asn Asp Ile Val His  
 900 905 910  
 Leu Pro Arg Asp Met Gly His Leu Gln Val Asp Tyr Arg Asp Asn Arg  
 915 920 925  
 Leu His Pro Ser Glu Asp Ser Ser Leu Asp Ser Ile Ala Ser Val Val  
 930 935 940  
 Val Pro Ile Ile Ile Cys Leu Ser Ile Ile Ile Ala Phe Leu Phe Ile  
 945 950 955 960  
 Asn Gln Lys Lys Gln Trp Ile Pro Leu Leu Cys Trp Tyr Arg Thr Pro  
 965 970 975  
 Thr Lys Pro Ser Ser Leu Asn Asn Gln Leu Val Ser Val Asp Cys Lys  
 980 985 990  
 Lys Gly Thr Arg Val Gln Val Asp Ser Ser Gln Arg Met Leu Arg Ile  
 995 1000 1005



Ala Glu Pro Asp Ala Arg Phe Ser Gly Phe Tyr Ser Met Gln Lys Gln  
1010 1015 1020

Asn His Leu Gln Ala Asp Asn Phe Tyr Gln Thr Val  
1025 1030 1035